



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2000-06

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U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Airworthiness Programs Branch, AFS-610
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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

Biweekly 2000-01

99-27-01		Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219
99-27-03		Fokker	F27 Mark 050 Series
99-27-04		Rolls-Royce	Engine: Dart 506, 510, 511, 514, 525, 526, 529, 530, +
99-27-05		Boeing	767-200, -300, and -300F Series
99-27-06		Boeing	757-200, -200PF, and -200CB Series
99-27-07	S 98-25-53	Airbus	A300 B4-600R and A300 F4-600R Series
99-27-08		SAAB	SAAB SF340A and SAAB 340B Series
99-27-09		Airbus	A300 B4-203 Series
99-27-10		Airbus	A310 and A300-600 Series
99-27-11		British Aerospace	BAC 1-11 200 and 400 Series
99-27-13		Fokker	F27 Mark 050 Series
99-27-14	S 99-01-15	Airbus	A340-211, -212-, -213, -311, -312, and -313 Series
99-27-15		General Electric	Engine: GE90-76B, -77B, -85B, -90B, and -92B
99-27-16		CFE	Engine: CFE738-1-1B
2000-01-51	E	Bombardier	CL-600-2B16 (CL-604)

Biweekly 2000-02

98-19-15 R1	R 98-19-15	Fairchild	SA226-T, SA226-T(B), SA226-AT, SA226-TC +
99-26-21		Boeing	737-300, -400, -500, -600, -700, and -800 Series
2000-01-01		Airbus	A300 B2-1A, B2-1C, B2-203, B2K-3C, B4-103, B4-2C +
2000-01-02		Raytheon	BAe.125 Series 1000A and 1000B and Hawker 1000 Series
2000-01-03		SAAB	SAAB 2000 Series
2000-01-04		SAAB	SAAB 2000 Series
2000-01-07		Bombardier	DHC-8-100, -200, and -300 Series
2000-01-08		British Aerospace	ATP
2000-01-09		General Electric	Engine: CJ610 Series and CF700 Series
2000-01-12	S 97-14-11	Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-01-13	S 99-08-12	Pratt & Whitney	Engine: JT9D-7, -7A, -7H, -7AH, -7F, -7J, -20, -20J +
2000-01-14		Boeing	777 Series
2000-01-15		Fokker	F27 Mark 050 Series
2000-01-17		McDonnell Douglas	MD-90 Series
2000-01-18		McDonnell Douglas	DC-8 Series
2000-01-51		Bombardier	CL-604 variant of Canadair Model CL-600-2B16 Series
2000-02-01		McDonnell Douglas	DC-8 Series
2000-02-02		Short Brothers	SD3-60 SHERPA, SD3-SHERPA Series and SD3-30 Series
2000-02-03		Boeing	737-300, -400, and -500 Series
2000-02-04		Airbus	A300 Series, A300-600, and A310 Series
2000-02-13		Bombardier	DHC-8-100, -200, and -300 Series

Biweekly 2000-03

99-26-03	COR	McDonnell Douglas	MD-11 Series
2000-02-05	S 98-24-01	British Aerospace	Jetstream 4101
2000-02-06		Bombardier	DHC-8-100, -200, and -300 Series
2000-02-07		Bombardier	DHC-7-100 Series
2000-02-08		Dornier	328-100 Series
2000-02-10		Boeing	747 Series
2000-02-11		Boeing	777-200 Series
2000-02-15		Raytheon	65-90, 65-A90, B90, and C90
2000-02-17		Rolls-Royce	Engine: RB211 Trent 768-60, 772-60, and 772B-60 Series
2000-02-18	S 97-09-14	Boeing	737-100, -200, -300, -400, and -500 Series
2000-02-19	S 90-02-16	Boeing	727 Series
2000-02-20	S 95-13-12 R1	Boeing	767 Series

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Biweekly 2000-03...Cont'd

2000-02-21		British Aerospace	Jetstream 4101
2000-02-22		Boeing	747-400 Series
2000-02-23		McDonnell Douglas	DC-9-10, -20, -30, -40, and -50 Series and DC-9-81, +
2000-02-24		Airbus	A300, A310, and A300-600 Series
2000-02-33		Boeing	747-400 Series
2000-02-34		Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-02-35		Raytheon	DH.125, HS.125, BH.125 Series 1A, 1B, 3A, 400A, +
2000-02-36	S 98-20-10	Airbus	A319, A320, and A321 Series
2000-02-37		Boeing	747 Series
2000-02-38	S 91-20-07	Airbus	A300, A300-600, and A310 Series
2000-03-01		Boeing	747-100 and -200 Series
2000-03-02		General Electric	Engine: GE90-90B, -85B, and -76B Series
2000-03-03		General Electric	Engine: CF34-3A1 and -3B1 Series

Biweekly 2000-04

99-23-26 R1		General Electric	Engine: CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B +
2000-02-27		Empresa	EMB-110P1 and EMB-110P2
2000-02-39		Airbus	A300 Series
2000-03-04		General Electric	Engine: CF6-80C2 Series turbofan
2000-03-05		Boeing	737-200 Series
2000-03-07		Rolls-Royce	Engine: RB211-524H-36 Series turbofan
2000-03-08		McDonnell Douglas	MD-90-30
2000-03-10		McDonnell Douglas	MD-11 Series
2000-03-11		McDonnell Douglas	MD-11 Series
2000-03-12		McDonnell Douglas	MD-11 Series
2000-03-13		McDonnell Douglas	MD-11 Series
2000-03-14		McDonnell Douglas	MD-11 Series
2000-03-15		McDonnell Douglas	MD-11 and MD-11F Series
2000-03-16		McDonnell Douglas	MD-11 Series
2000-03-17	S 97-23-01	Fairchild	SA226 and SA227 Series
2000-03-20		Airbus	A300-600
2000-03-21		Boeing	767
2000-03-22		Boeing	747-100, -200, and 747SP Series
2000-04-02		Boeing	737-100, -200, -300, -400, and -500 Series
2000-04-03		McDonnell Douglas	DC-3 and DC-4 Series
2000-04-04		Fokker	F.28 Mark 0070 and 0100 Series
2000-04-05		Israel	Astra SPX Series
2000-04-06		Airbus	A319, A320, and A321 Series
2000-04-07		British Aerospace	ATP
2000-04-08		Boeing	737-200C Series
2000-04-09		Empresa	EMB-135 and EMB-145 Series
2000-04-10		Hoffmann	Propeller: HO27() and HO4/27 Series
2000-04-11		Airbus	A319, A320, and A321 Series

Biweekly 2000-05

98-21-21	R1	Bob Fields Aeroaccessories	Appliance: Electric inflatable door seals
2000-03-51		McDonnell Douglas	DC-9, MD-90-30, 717-200, and MD-88
2000-04-13		Aerospatiale	ATR72 Series
2000-04-14		General Electric	Engine: CF6-80C2 A1/A2/A3/A5/A8/A5F/B1/B2/B4/B6 +
2000-04-17		Boeing	747-100, -200, and -300 Series
2000-04-18		Boeing	757 Series
2000-04-19		Dassault	Mystere-Falcon 50 Series
2000-04-22		Rolls-Royce	Engine: RB211-524G2-T-19, RB211-524G3-T-19, +

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Biweekly 2000-05...Cont'd

2000-04-23		Dornier	328-100 Series and 328-300 Series
2000-05-09		Boeing	757-200, -200PF, and -200CB Series
2000-05-10		General Electric	Engine: GE90-85B Series turbofan

Biweekly 2000-06

2000-03-03	COR	General Electric	Engine: CF34-3A1 and -3B1 Series turbofan
2000-04-24		Honeywell International	Appliance: Auxiliary Power Units
2000-05-01		McDonnell Douglas	MD-11 Series
2000-05-02		Fokker	F27 Mark 050, 200, 500, and 600 Series
2000-05-04		Airbus	A330 and A340 Series
2000-05-05		Construcciones Aeronauticas	CN-235-100 and CN-235-200 Series
2000-05-07		Airbus	A300 and A300-600 Series
2000-05-08		Airbus	A319 and A321 Series
2000-05-14	S 80-22-53 & 97-05-11 R1	AlliedSignal	Engine: ALF502 and LF507 Series turbofan
2000-05-18		Airbus	A300, A310, and A300-600 Series
2000-05-19		Boeing	727 Series
2000-05-20		Dassault	Fan Jet Falcon, Mystere-Falcon 20, 50, 200, and 900 +
2000-05-21		Airbus	A319, A320, A321, A330, and A340 Series
2000-05-24		Honeywell International	Appliance: KAP 140 or KFC 225 autopilot system
2000-05-25	S 96-14-09	British Aerospace	BAe 146-100A, -200A, and -300A Series
2000-05-26	S 93-18-04	Aerospatiale	ATR42-200, ATR42-300, and ATR42-320 Series
2000-05-27	S 98-21-06	British Aerospace	BAe 146-100A, -200A, and -300A Series
2000-05-28		British Aerospace	BAe 146 and Avro 146-RJ Series
2000-05-29		Boeing	737-100, -200, -300, -400, and -500 Series
2000-05-30		Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300 +
2000-06-02		Dornier	228-100, 228-101, 228-200, 228-201, 228-202, +
2000-06-04		Fairchild	SA226-T, SA226-AT, SA226-T(B), SA227-AT, +

**GENERAL ELECTRIC COMPANY
AIRWORTHINESS DIRECTIVE
ENGINE
CORRECTION
LARGE AIRCRAFT**

Correction

2000-03-03 GENERAL ELECTRIC COMPANY: Amendment 39-11560; Docket 99-NE-49 AD.

Applicability: General Electric Company (GE) CF34-3A1 and -3B1 series turbofan engines, installed on but not limited to Bombardier Canadair CL601R (RJ) aircraft.

NOTE 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent critical life-limited rotating engine part failure, which could result in an uncontained engine failure and damage to the airplane, accomplish the following:

Inspections

(a) Within the next 30 days after the effective date of this AD, revise the CF34 Engine Maintenance Program, Chapter 5-21-00, of the GE CF34 Series Turbofan Engine Manual, SEI-756, and for air carrier operations revise the approved continuous airworthiness maintenance program, by adding the following:

“9. CF34-3A1 and CF34-3B1 Engine Maintenance Program – Shop Level Mandatory Inspection Requirements.

A. This procedure is used to identify specific piece-parts that require mandatory inspections that must be accomplished at each piece-part exposure using the applicable Chapters referenced in Table 804 for the inspection requirements.

B. Piece-part exposure is defined as follows:

(1) For engines that utilize the “On Condition” maintenance requirements:

The part is considered completely disassembled when done in accordance with the disassembly instructions in the GEAE engine authorized overhaul Engine Manual, and the part has accumulated more than 100 cycles-in-service since the last piece-part opportunity inspection, provided that the part was not damaged or related to the cause for its removal from the engine.

(2) For engines that utilize the “Hard Time” maintenance requirements:

The part is considered completely disassembled when done in accordance with the disassembly instructions used in the “Minor Maintenance” or “Overhaul” instructions in the GEAE engine authorized Engine Manual, and the part has accumulated more than 100 cycles in service since the last piece-part opportunity inspection, provided that the part was not damaged or related to the cause for its removal from the engine.

C. Refer to Table 804 below for the mandatory inspection requirements.

TABLE 804. MANDATORY INSPECTION REQUIREMENTS

Part Name/Part No.	Chapter Section/Subject	Mandatory Inspection
Fan Disk (all)	72-21-00, INSPECTION	All areas (FPI) ¹ Bores (ECI) ²
Stage 1 high pressure turbine (HPT)	72-46-00, INSPECTION	All areas (FPI) ¹ Bores (ECI) ²
Rotor Disk (all)		Boltholes (ECI) ² Air Holes (ECI) ²
Stage 2 HPT Rotor Disk (all)	72-46-00, INSPECTION	All Areas (FPI) ¹ Bores (ECI) ² (a) Boltless Rim Configuration Boltholes (FPI) ¹ Air Holes (FPI) ¹ (b) Bolted Rim Configuration Boltholes (ECI) ² Air Holes (ECI) ² .
HPT Rotor Outer Torque Coupling (all)	72-46-00, INSPECTION	All areas (FPI) ¹ Bore (ECI) ²

¹ FPI = Fluorescent Penetrant Inspection Method

² ECI = Eddy Current Inspection”

(b) Except as provided in paragraph (c) of this AD, and notwithstanding contrary provisions in section 43.16 of the Federal Aviation Regulations (14 CFR 43.16), these mandatory inspections shall be performed only in accordance with the CF34 Engine Maintenance Program, Chapter 5-21-00, of the General Electric Company, CF34 Series Turbofan Engine Manual, SEI-756.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Engine Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector (PMI), who may add comments and then send it to the Engine Certification Office.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) FAA-certificated air carriers that have an approved continuous airworthiness maintenance program in accordance with the record keeping requirement of § 121.369 (c) of the Federal Aviation Regulations [14 CFR 121.369 (c)] must maintain records of the mandatory inspections that result from revising the CF34 Engine Maintenance Program and the air carrier's continuous airworthiness program. Alternately, certificated air carriers may establish an approved system of record retention that provides a method for preservation and retrieval of the maintenance records that include the inspections resulting from this AD, and include the policy and procedures for implementing this alternate method in the air carrier's maintenance manual required by § 121.369 (c) of the Federal Aviation Regulations [14 CFR 121.369 (c)]; however, the alternate system must be accepted by the appropriate PMI and require the maintenance records be maintained either indefinitely or until the work is repeated. Records of the piece-part inspections are not required under § 121.380 (a) (2) (vi) of the Federal Aviation Regulations [14 CFR 121.380 (a) (2) (vi)]. All other operators must maintain the records of mandatory inspections required by the applicable regulations governing their operations.

NOTE 3: The requirements of this AD have been met when the engine manual changes are made and air carriers have modified their continuous airworthiness maintenance plans to reflect the Engine Maintenance Program requirements specified in the GE CF34 Series Turbofan Engine Manual.

The effective date of this amendment remains March 13, 2000.

FOR FURTHER INFORMATION CONTACT: Kevin Donovan, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7743, fax (781) 238-7199.

Issued in Burlington Massachusetts

David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

**HONEYWELL INTERNATIONAL
AIRWORTHINESS DIRECTIVE
APPLIANCE
LARGE AIRCRAFT**

2000-04-24 HONEYWELL INTERNATIONAL (formerly AlliedSignal Inc.): Amendment 39-11607.
Docket 99-NE-34-AD.

Applicability: Honeywell International (formerly AlliedSignal Inc.) 36-300(A), 36-280(B), and 36-280(D) series Auxiliary Power Units (APUs), with load compressor impellers, part numbers (P/Ns) 3822270-4, or 3822270-5, installed. These APUs are installed on but not limited to Airbus Industrie A319, A320, and A321 series; Boeing 737-300, -400, -500 series; and McDonnell Douglas MD-80 series airplanes.

NOTE 1: This airworthiness directive (AD) applies to each APU identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For APUs that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

NOTE 2: The presence or absence of the letters "GTCP" preceding the model series does not affect the applicability of this AD to the specified model APUs.

NOTE 3: AD 92-21-05 requires that all APUs with load compressor impellers, P/Ns 3822270-1 or 3822270-3, be reworked to the -4 configuration.

Compliance: Required as indicated, unless accomplished previously.

To prevent an uncontained APU failure and damage to the airplane, accomplish the following:

Load Compressor Impellers, P/N 3822270-4

(a) For APUs with load compressor impellers, P/N 3822270-4, at the next shop visit, or within 6 months after the effective date of this AD, whichever occurs first, accomplish either of the following:

(1) Install an external load compressor containment shield in accordance with AlliedSignal Inc. Service Bulletins (SBs) No. GTCP36-49-7471, dated April 20, 1999, GTCP36-49-7472, dated March 31, 1999, or GTCP36-49-7473, dated March 31, 1999, as applicable; or

(2) Install load compressor impeller, P/N 3822270-5.

Load Compressor Impellers, P/N 3822270-5

(b) For APUs with load compressor impellers, P/N 3822270-5, install an external load compressor containment shield within one year after the effective date of this AD, or prior to the impeller exceeding 26,000 cycles-since-new (CSN), whichever occurs later, in accordance with AlliedSignal Inc. SBs No. GTCP36-49-7471, dated April 20, 1999, GTCP36-49-7472, dated March 31, 1999, or GTCP36-49-7473, dated March 31, 1999, as applicable.

NOTE 4: Operators may use their own FAA-approved tracking system for determining load compressor impeller cyclic count in lieu of the procedure described in the AlliedSignal Inc. SBs referenced in this AD.

Cyclic Limit without External Containment Shield

(c) Following one year after the effective date of this AD, operators cannot operate with a load compressor, P/N 3822270-5, installed, past 26,000 cycles unless they have installed an external load compressor containment shield.

Definition

(d) For the purpose of this AD, a shop visit is defined as when the APU is inducted into a shop for any reason.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office. Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles Aircraft Certification Office.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Los Angeles Aircraft Certification Office.

Ferry Flights

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) The actions required by this AD shall be done in accordance with the following AlliedSignal Inc. SBs: GTCP36-49-7471, dated April 20, 1999, GTCP36-49-7472, dated March 31, 1999, and GTCP36-49-7473, dated March 31, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Honeywell International, Inc., Attn: Data Distribution, M/S 64-3/2101-201, PO Box 29003, Phoenix, AZ 85038-9003; telephone 602-365-2493, fax 602-365-5577. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(h) This amendment becomes effective on May 8, 2000.

FOR FURTHER INFORMATION CONTACT:

Roger Pesuit, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; telephone 562-627-5251, fax 562-627-5210.

Issued in Burlington, Massachusetts, on February 25, 2000.

Jay J. Pardee, Manager, Engine and Propeller Directorate, Aircraft Certification Service.

**MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-01 MCDONNELL DOUGLAS: Amendment 39-11610. Docket 2000-NM-61-AD.

Applicability: Model MD-11 series airplanes, certificated in any category, having the serial numbers listed below.

Group 1 Airplanes:

48406	48543	48574	48605	48746	48767
48415	48544	48575	48623	48747	48768
48439	48545	48576	48624	48748	48770
48470	48546	48577	48631	48749	48773
48471	48549	48578	48632	48753	48774
48504	48565	48579	48633	48754	48775-48779 inclusive
48513	48566	48600	48679	48755	48780
48532	48571	48601	48743	48756	
48533	48572	48602	48744	48758	
48542	48573	48603	48745	48766	

Group 2 Airplanes:

48539	48557	48562	48617	48757	48800
48540	48558	58563	48618	48781-48792 inclusive	48801
48541	48559	48564	48629	48794	48802-48806 inclusive
48555	48560	48581	48630	48798	
48556	48561	48616	48634	48799	

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent overheating of the electrical pins inside the cargo control units (CCU) and subsequent release of hot gases and flames, which could result in smoke and fire in the cargo compartment, accomplish the following:

Deactivation

(a) For Group 1 airplanes: Within 15 days after the effective date of this AD, deactivate the forward and center CCU's in accordance with the following procedures:

Remove the access panel to the forward cargo compartment CCU circuit breaker panel located at fuselage station 1009.300 (right side looking aft). Pull and collar the following circuit breakers:

B1-480	B1-485	B1-488	B1-495	B1-500
B1-481	B1-486	B1-489	B1-498	B1-506
B1-482	B1-487	B1-490	B1-499	

Remove the access panel to the center cargo compartment CCU circuit breaker panel located at fuselage station 1701.000 (right side looking aft). Pull and collar the following circuit breakers:

B1-518	B1-552	B1-753	B1-760	B1-763
B1-519	B1-751	B1-758	B1-761	B1-764
B1-520	B1-752	B1-759	B1-762	

(b) For Group 2 airplanes: Within 15 days after the effective date of this AD; deactivate the forward and center CCU's in accordance with the following procedures:

Remove the access panel to the forward cargo compartment CCU circuit breaker panel located at fuselage station 1009.300 (right side looking aft). Pull and collar the following circuit breakers:

B1-480	B1-485	B1-488	B1-495	B1-500
B1-481	B1-486	B1-489	B1-498	B1-506
B1-482	B1-487	B1-490	B1-499	

Remove the access panel to the center cargo compartment CCU circuit breaker panel located at fuselage station 1701.000 (right side looking aft). Pull and collar the following circuit breakers:

B1-518	B1-552	B1-753	B1-760	B1-764
B1-519	B1-751	B1-758	B1-761	
B1-520	B1-752	B1-759	B1-762	

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) This amendment becomes effective on March 20, 2000.

FOR FURTHER INFORMATION CONTACT:

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 28, 2000.

John J. Hickey, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**FOKKER SERVICES BV
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-02 FOKKER SERVICES B.V: Amendment 39-11611. Docket 98-NM-186-AD.

Applicability: Model F27 Mark 050 series airplanes as listed in Fokker Service Bulletin SBF50-30-025, Revision 2, dated October 21, 1998; and Model F27 Mark 200, 500, and 600 series airplanes, serial numbers 10603 through 10692 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent undetected failures of the horizontal and vertical stabilizer de-icing system, which could result in reduced controllability of the airplane, accomplish the following:

AFM Revision (Mark 050 Airplanes)

(a) For Model F27 Mark 050 series airplanes on which a de-icing distributor valve heating system has not been installed (Reference Fokker Service Bulletin SBF50-30-024): Within 10 days after the effective date of this AD, revise the Limitations and Normal Procedures Sections of the FAA-approved Airplane Flight Manual (AFM) to include the following information. This may be accomplished by inserting a copy of this AD into the AFM.

“PRE-FLIGHT INSPECTION PROCEDURE FOR FLIGHTS INTO KNOWN OR FORECAST ICING CONDITIONS

- Cycle the airframe de-icing system twice through the Manual 1 and 2 position during ground operation.
- Visually check the tailplane leading edge de-icing boots for inflation.”

Installations and AFM Revision (Mark 050 Airplanes)

(b) For Model F27 Mark 050 series airplanes: Within 18 months after the effective date of this AD, accomplish the requirements of paragraphs (b)(1) and (b)(2) of this AD.

(1) Install a monitoring system for the horizontal and vertical stabilizer de-icing system in accordance with Fokker Service Bulletin SBF50-30-025, Revision 2, dated October 21, 1998. Prior to further flight thereafter, revise the FAA-approved AFM to incorporate the flight manual changes described in Fokker Manual Change Notification (MCNO) F50-001, dated October 23, 1997. Following accomplishment of the installation, the AFM revision required by paragraph (a) of this AD may be removed from the AFM.

(2) Install a modified pressure switch in the monitoring system in accordance with Fokker Service Bulletin SBF50-30-026, dated August 11, 1999.

Installations and AFM Revision (Mark 200, 500, 600 Airplanes)

(c) For Model F27 Mark 200, 500, and 600 series airplanes: Within 18 months after the effective date of this AD, accomplish the requirements of paragraphs (c)(1) and (c)(2) of this AD.

(1) Install a monitoring system for the horizontal and vertical stabilizer de-icing system in accordance with Fokker Service Bulletin F27/30-44, dated February 20, 1998. Prior to further flight thereafter, revise the FAA-approved AFM to incorporate the flight manual changes described in Fokker MCNO F27-004, dated February 10, 1998.

(2) Install a modified pressure switch in the monitoring system in accordance with Fokker Service Bulletin F27/30-45, dated August 11, 1999.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (a) of this AD, the actions shall be done in accordance with the following Fokker service bulletins, including Fokker manual change notifications, as applicable, which contain the following specified effective pages:

Referenced And Date	Document Page Number	Revision Level Shown on Page	Date Shown on Page
SBF50-30-025, Revision 2, October 21, 1998	1-3, 14, 15, 17-19	2	October 21, 1998
	4-13, 16, 22-25, 27-41, 43-45	Original	October 31, 1997
	20, 21, 26, 42	1	June 10, 1998
	Manual Change Notification MCNO F50-001		
SBF27/30-44, February 20, 1998	1	Original	October 23, 1997
	1-31	Original	February 20, 1998
	Manual Change Notification MCNM F27-003		
	1-5	Original	December 10, 1997
SBF50-30-026, August 11, 1999 F27/30-45, August 11, 1999	1-2	Original	February 10, 1998
	1-10	Original	August 11, 1999
	1-12	Original	August 11, 1999
	Manual Change Notification MCNO F27-004		

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Fokker Services B.V., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Dutch airworthiness directives 1998-019/2, and 1997-113/3, both dated June 18, 1999.

(g) This amendment becomes effective on April 12, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 29, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-04 AIRBUS: Amendment 39-11613. Docket 99-NM-241-AD.

Applicability: Model A330 and A340 series airplanes, certificated in any category; except those on which Airbus production modification 46025 is installed or on which Airbus Service Bulletin A330-53-3097, Revision 01, dated May 21, 1999 (for Model A330 series airplanes), or Service Bulletin A340-53-4108, Revision 01, dated May 21, 1999 (for Model A340 series airplanes), has been accomplished.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking of the fuselage skin in the area of the VHF2 antenna, which could result in cabin depressurization of the airplane, accomplish the following:

Detailed Visual Inspection

(a) At the latest of the times specified in paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this AD, as applicable: Perform a detailed visual inspection (without removal of the VHF2 antenna) of the fuselage skin aft of frame 54, between the airplane centerline and stringer 56R in the area of the VHF2 antenna to detect cracks, in accordance with Airbus Service Bulletin A330-53-3094, Revision 02, dated May 28, 1998 (for Model A330 series airplanes), or Service Bulletin A340-53-4105, Revision 02, dated May 25, 1998 (for Model A340 series airplanes) (hereinafter referred to as the applicable service bulletin). Thereafter, if no cracks are detected, repeat the detailed visual inspection every 36 flight hours until accomplishment of the high frequency eddy current (HFEC) inspection required by paragraph (b) of this AD.

(1) Prior to the accumulation of 900 total flight hours.

(2) Within 1,250 flight hours since accomplishment of the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin, if the interim repair has been accomplished prior to the effective date of this AD.

(3) Within 300 flight hours since the most recent HFEC inspection accomplished in accordance with the applicable service bulletin, if the most recent HFEC inspection has been accomplished prior to the effective date of this AD.

(4) Within 36 flight hours after the effective date of this AD.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

High Frequency Eddy Current Inspection

(b) Perform a high frequency eddy current (HFEC) inspection to detect cracks of the fuselage skin aft of frame 54, between the airplane centerline and stringer 56R in the area of the VHF2 antenna, in accordance with the applicable service bulletin, at the applicable time specified by paragraph (b)(1) or (b)(2) of this AD. Accomplishment of this inspection terminates the requirements of paragraph (a) of this AD.

(1) For airplanes on which the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin has not been accomplished: Prior to the accumulation of 900 total flight hours on the airplane, or within 500 flight hours after the effective date of this AD, whichever occurs later. Thereafter, accomplish the follow-on actions of paragraph (c) or (d) of this AD, as applicable.

(2) For airplanes on which the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin has been accomplished: Within 1,250 flight hours after accomplishment of the interim repair, or within 500 flight hours after the effective date of this AD, whichever occurs later.

Repetitive Inspections

(c) If no crack is detected during the HFEC inspection required by paragraph (b) of this AD, accomplish the repetitive inspections required by paragraph (c)(1) or (c)(2) of this AD, as applicable.

(1) For airplanes on which the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin has not been accomplished, accomplish the actions specified by paragraphs (c)(1)(i) and (c)(1)(ii) of this AD.

(i) Repeat the HFEC inspection specified by paragraph (b) at intervals not to exceed 500 flight hours.

(ii) Within 300 flight hours after each HFEC inspection required by this AD: Perform a detailed visual inspection (without removal of the VHF2 antenna) of the fuselage skin aft of frame 54, between the airplane centerline and stringer 56R in the area of the VHF2 antenna to detect cracks, in accordance with the applicable service bulletin. Thereafter, if no cracks are detected, repeat the detailed visual inspection every 36 flight hours until accomplishment of the next HFEC inspection required by paragraph (c)(1)(i) of this AD.

(2) For airplanes on which the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin has been accomplished, repeat the HFEC inspection specified by paragraph (b) of this AD at intervals not to exceed 1,250 flight hours.

Corrective Actions

(d) If any crack is detected during any inspection required by paragraph (a), (b), or (c) of this AD, and the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin has not been accomplished: Prior to further flight, accomplish the actions specified by paragraph (d)(1) or (d)(2) of this AD, as applicable.

(1) If only one crack is detected and that crack is 9.45 inches or less, and is within the limits specified by the applicable service bulletin: Install the interim repair specified in paragraph 2.C.(4) of the applicable service bulletin. Thereafter, repeat the HFEC inspection specified by paragraph (b) of this AD at intervals not to exceed 1,250 flight hours.

NOTE 3: The interim repair referenced by this AD consists of cutting out the cracked portion of the fuselage skin, and installing a filler plate in the skin cutout, two doublers, and shims, as described in paragraph 2.C.(4) of the applicable service bulletin.

NOTE 4: Accomplishment of the interim repair in accordance with paragraph 4.3 of Airbus Industrie All Operator Telex (AOT) 53-10, dated September 24, 1997, is acceptable for compliance with the requirements of paragraph (d)(1) of this AD.

(2) If any crack is detected that is longer than 9.45 inches, or is outside the limits specified by the service bulletin, or if more than one crack is detected: Repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

(e) If any crack is detected during any inspection required by paragraph (a), (b), or (c) of this AD and the interim repair specified by paragraph 2.C.(4) of the applicable service bulletin has been accomplished: Prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

(f) Accomplishment of the modification as described in Airbus Service Bulletin A330-53-3097, Revision 01, dated May 21, 1999 (for Model A330 series airplanes), or Service Bulletin A340-53-4108, Revision 01, dated May 21, 1999 (for Model A340 series airplanes), terminates the repetitive inspections required by paragraphs (a), (b), and (c) of this AD.

NOTE 5: Accomplishment of Airbus production modification 46025, or the modification as described in Airbus Service Bulletin A330-53-3097, dated July 29, 1998 (for Model A330 series airplanes), or Service Bulletin A340-53-4108, dated July 31, 1998 (for Model A340 series airplanes), also constitutes terminating action for the repetitive inspections required by paragraphs (a), (b), and (c) of this AD.

Alternative Methods of Compliance

(g) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 6: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(h) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(i) Except as provided by paragraphs (d)(2) and (e) of this AD, the actions shall be done in accordance with Airbus Service Bulletin A330-53-3094, Revision 02, dated May 28, 1998; or Airbus Service Bulletin A340-53-4105, Revision 02, dated May 25, 1998; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 7: The subject of this AD is addressed in French airworthiness directives 1998-192-071(B)R1 (for Model A330 series airplanes) and 1998-193-089(B)R1 (for Model A340 series airplanes), both dated March 24, 1999.

(j) This amendment becomes effective on April 12, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 29, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**CONSTRUCCIONES AERONAUTICAS SA
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-05 CONSTRUCCIONES AERONAUTICAS, S.A. (CASA): Amendment 39-11614. Docket 99-NM-261-AD.

Applicability: All Model CN-235-100 and CN-235-200 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent ice accumulation on the wings or tail of the airplane, which could result in reduced controllability of the airplane, accomplish the following:

Replacement

(a) Within 4 months after the effective date of this AD, replace the existing anti-icing distributor valves, having part number (P/N) AC960013, in the wing and tail areas of the airplane, with new, improved valves, having P/N AC911016, in accordance with CASA Service Bulletin SB-235-30-14, dated August 13, 1999.

(b) As of the effective date of this AD, no person shall install a distributor valve having P/N AC960013 on any airplane.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The replacement shall be done in accordance with CASA Service Bulletin SB-235-30-14, dated August 13, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Construcciones Aeronauticas, S.A., Getafe, Madrid, Spain. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Spanish airworthiness directive 04/99, dated July 30, 1999.

(f) This amendment becomes effective on April 12, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 29, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-07 AIRBUS INDUSTRIE: Amendment 39-11616. Docket 99-NM-337-AD. Supersedes AD 99-19-26, Amendment 39-11313.

Applicability: Model A300 series airplanes, as listed in Airbus Service Bulletin A300-57-0234, Revision 01, dated March 11, 1998; and Model A300-600 series airplanes, as listed in Airbus Service Bulletin A300-57-6087, Revision 01, dated March 11, 1998; except airplanes on which Airbus Modification 11912 has been installed in production, or on which Airbus Modification 11932 has been accomplished; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking of the main landing gear (MLG) attachment fittings, which could result in reduced structural integrity of the airplane, accomplish the following:

Repetitive Inspections

(a) Perform a detailed visual and a high frequency eddy current (HFEC) inspection to detect cracks in Gear Rib 5 of the MLG attachment fittings at the lower flange, in accordance with Airbus Service Bulletin A300-57-6087, Revision 01, dated March 11, 1998 (for Model A300-600 series airplanes); or A300-57-0234, Revision 01, dated March 11, 1998 (for Model A300 series airplanes); as applicable; at the time specified in paragraph (a)(1) or (a)(2) of this AD, as applicable. After the effective date of this AD, only Airbus Service Bulletin A300-57A0234, Revision 02, dated June 24, 1999, or Revision 03, including Appendix 01, dated September 2, 1999 (for Model A300 series airplanes); or A300-57A6087, Revision 02, including Appendix 01, dated June 24, 1999 (for Model A300-600 series airplanes); as applicable; shall be used. Repeat the inspections thereafter at intervals not to exceed 1,500 flight cycles.

Detailed Visual Inspection

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) For airplanes that have accumulated 20,000 or more total flight cycles as of March 9, 1998: Inspect within 500 flight cycles after March 9, 1998.

(2) For airplanes that have accumulated less than 20,000 total flight cycles as of March 9, 1998: Inspect prior to the accumulation of 18,000 total flight cycles, or within 1,500 flight cycles after March 9, 1998, whichever occurs later.

NOTE 3: Accomplishment of the initial detailed visual and HFEC inspections in accordance with Airbus Service Bulletin A300-57A0234 or A300-57A6057, both dated August 1, 1997, as applicable, is considered acceptable for compliance with the initial inspections required by paragraph (a) of this AD.

Repair

(b) If any crack is detected during any inspection required by this AD, prior to further flight, accomplish the requirements of paragraphs (b)(1) or (b)(2) of this AD, as applicable.

(1) If a crack is detected at one hole only, and the crack does not extend out of the spotface of the hole, repair in accordance with Airbus Service Bulletin A300-57A0234, Revision 02, dated June 24, 1999, or Revision 03, including Appendix 01, dated September 2, 1999 (for Model A300 series airplanes); or A300-57A6087, Revision 02, including Appendix 01, dated June 24, 1999 (for Model A300-600 series airplanes); as applicable.

(2) If a crack is detected at more than one hole, or if any crack at any hole extends out of the spotface of the hole, repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, or the Direction Générale de l'Aviation Civile (or its delegated agent).

Terminating Modification

(c) Prior to the accumulation of 21,000 total flight cycles, or within 2 years after October 20, 1999 (the effective date of AD 99-19-26, amendment 39-11313), whichever occurs later: Modify Gear Rib 5 of the MLG attachment fittings at the lower flange in accordance with Airbus Service Bulletin A300-57-6088, Revision 01, including Appendix 01 (for Model A300-600 series airplanes), or A300-57-0235, Revision 01, including Appendix 01 (for Model A300 series airplanes), all dated February 1, 1999, as applicable. Accomplishment of this modification constitutes terminating action for the repetitive inspection requirements of this AD.

NOTE 4: Accomplishment of the modification required by paragraph (d) of this AD prior to the effective date of this AD in accordance with Airbus Service Bulletin A300-57-6088 or A300-57-0235, both dated August 1, 1998; as applicable; is acceptable for compliance with the requirements of that paragraph.

Alternative Methods of Compliance

(d) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

(2) Alternative methods of compliance, approved previously in accordance with AD 99-19-26, amendment 39-11313, are approved as alternative methods of compliance with this AD.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (b)(2) of this AD, the actions shall be done in accordance with Airbus Service Bulletin A300-57-6087, Revision 01, dated March 11, 1998; Airbus Service Bulletin A300-57A6087, Revision 02, including Appendix 01, dated June 24, 1999; Airbus Service Bulletin A300-57-0234, Revision 01, dated March 11, 1998; Airbus Service Bulletin A300-57A0234, Revision 02, dated June 24, 1999; Airbus Service Bulletin A300-57A0234, Revision 03, including Appendix 01, dated September 2, 1999; Airbus Service Bulletin A300-57-6088, Revision 01, including Appendix 01, dated February 1, 1999; and Airbus Service Bulletin A300-57-0235, Revision 01, including Appendix 01, dated February 1, 1999; as applicable.

(1) The incorporation by reference of Airbus Service Bulletin A300-57A6087, Revision 02, including Appendix 01, dated June 24, 1999; Airbus Service Bulletin A300-57A0234, Revision 02, dated June 24, 1999; and Airbus Service Bulletin A300-57A0234, Revision 03, including Appendix 01, dated September 2, 1999; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Airbus Service Bulletin A300-57-6087, Revision 01, dated March 11, 1998; Airbus Service Bulletin A300-57-0234, Revision 01, dated March 11, 1998; Airbus Service Bulletin A300-57-6088, Revision 01, including Appendix 01, dated February 1, 1999; and Airbus Service Bulletin A300-57-0235, Revision 01, including Appendix 01, dated February 1, 1999; was approved previously by the Director of the Federal Register as of October 20, 1999 (64 FR 49966, September 15, 1999).

(3) Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 6: The subject of this AD is addressed in French airworthiness directive 1998-151-247(B), dated June 16, 1999.

(g) This amendment becomes effective on April 12, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 29, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-08 AIRBUS INDUSTRIE: Amendment 39-11617. Docket 99-NM-353-AD.

Applicability: Model A319 and A321 series airplanes, certificated in any category; except those on which Airbus Modification 27015 or Airbus Service Bulletin A320-29-1088, dated February 23, 1999, has been accomplished.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the ram air turbine (RAT) to deploy in an emergency situation, and consequent loss of electrical and hydraulic systems, accomplish the following:

Modification

(a) Within 18 months after the effective date of this AD: Replace the RAT actuator with an improved actuator, and modify the wiring of the RAT actuator; in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-29-1088, dated February 23, 1999.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The replacement and modification shall be done in accordance with Airbus Service Bulletin A320-29-1088, dated February 23, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in French airworthiness directive 1999-412-141(B), dated October 20, 1999.

(e) This amendment becomes effective on April 12, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on February 29, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**ALLIEDSIGNAL INC
AIRWORTHINESS DIRECTIVE
ENGINE
LARGE AIRCRAFT**

2000-05-14 ALLIEDSIGNAL INC.: Amendment 39-11624. Docket 96-ANE-36-AD Supersedes AD 80-22-53, Amendment 39-3995, and AD 97-05-11 R1, Amendment 39-10091.

Applicability: Allied Signal Inc. (formerly Textron Lycoming and Avco Lycoming) ALF502 and LF507 series turbofan engines, installed on but not limited to British Aerospace BAe 146-100A, BAe 146-200A, BAe 146-300A, AVRO 146-RJ70A, AVRO 146-RJ85A, AVRO 146-RJ100A, and Canadair Model CL-600-1A11 series airplanes.

NOTE 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a No. 4 and 5 duplex bearing failure, which can result in a Stage 4 low pressure turbine (LPT) rotor failure, an uncontained engine failure, and damage to the airplane, accomplish the following:

Replacement or Rework of the No. 4 and 5 Bearing Inlet Assembly

(a) For AlliedSignal Inc. (formerly Textron Lycoming and Avco Lycoming) ALF502L and ALF502L2 series engines, prior to further flight, rework or replace the following parts and reassemble in accordance with Avco Lycoming Service Bulletin (SB) No. ALF502-72-0008, Revision 1, dated October 14, 1980, and SB No. ALF502-72-0010, dated October 14, 1980:

(1) Remove No. 4 and 5 bearing inlet tube assembly, part number (PN) 2-141-380-07/-08/-11/-12 and replace with PN 2-141-380-13/-14.

(2) Remove adapter assembly, PN 2-141-640-01 and replace with PN 2-141-640-02.

(3) If not previously incorporated, install Bracket, PN 2-143-049-01, spacer PN 2-143-051-01, two bolts PN STD3061-11, Clamp PN TA1501H05, Bolt PN MS9565-06, Nut PN STD3073-3, and Washer PN STD3035C2.

(4) Rework fourth stage turbine nozzle, PN 2-141-150-38, to PN 2-141-150-42, or PN 2-141-150-39 to PN 2-141-150-41 in accordance with SB No. ALF502-72-0010.

(5) Rework upper half of fire shield, PN 2-163-990-04 to 2-163-990-07, or PN 2-163-990-05 to 2-163-990-08 in accordance with SB No. ALF502-72-0010.

(6) Install: Washer, PN 2-163-585-01, and Spring PN 2-163-586-01, and Retainer PN 2-163-584-01.

(7) Remove oil feed line, PN 2-173-240-02 and replace with PN 2-303-377-01.

(8) Remove jam nut, PN R44118P05W. (The function of the jam nut is accomplished by the parts in paragraphs (a)(6) and (a)(7) of this AD.)

(9) Remove oil inlet support bracket, PN 2-141-335-02 and replace with PN 2-141-335-03.

(b) After replacement of the No. 4 and 5 bearing oil inlet tube and associated hardware in accordance with paragraph (a) of this AD, inspect the No. 4 and 5 bearing oil inlet tube at intervals not to exceed 100 hours time in service (TIS) since last inspection for chafing, in accordance with Avco Lycoming SB No. ALF502-72-0008, Revision 1, dated October 14, 1980. Prior to further flight, replace oil inlet tubes that exhibit chafing in excess of 0.010 inch deep with serviceable parts.

Inspection of Oil Filter Bypass Valve

(c) For ALF502R series engines equipped with oil filter bypass valve, PN 2-303-432-01, accomplish the following:

(1) Inspect the engine oil filter bypass valve for leakage within the next 25 hours TIS or 25 flights in service, whichever occurs first, from the effective date of this AD, in accordance with Avco Lycoming Textron SB No. ALF 502R-79-0162, Original, dated March 23, 1987, or Revision 1, dated May 26, 1987. Prior to further flight, remove from service oil filters exhibiting any leakage and replace with serviceable parts.

(2) Thereafter, inspect the oil filter bypass valve for any leakage in accordance with Avco Lycoming Textron SB No. ALF 502R-79-0162, Original, dated March 23, 1987, or Revision 1, dated May 26, 1987, at intervals not to exceed 50 hours TIS or 50 flights in service since last inspection, whichever occurs first, and at the same time accomplish the following:

(i) Visually inspect the following engine chip detectors for metal contamination:

(A) For engines with a full flow chip detector installed, inspect the full flow chip detector.

(B) For engines without a full flow chip detector installed, inspect the chip detectors located in the accessory gearbox, Number 2 bearing scavenge line, and No. 4 and 5 bearing scavenge line.

(ii) For engines with engine chip detectors exhibiting Condition 3, or Condition 2, or Condition 1 where the oil filter bypass indicator is extended, prior to further flight, remove oil filter bypass valves exhibiting any leakage and replace with a serviceable part.

NOTE 2: Chip detector conditions are described in Figures 1, 2 and 3 of Avco Lycoming Textron SB No. ALF 502R-72-0160, Revision 1, dated March 23, 1987, or Revision 2, dated May 26, 1987.

(3) At the next engine shop visit, or within 2,500 hours TIS after the effective date of this AD, whichever occurs first, conduct the oil filter bypass valve spring compression force check, in accordance with Avco Lycoming Textron SB No. ALF 502R-79-0162, Original, dated March 23, 1987. Oil filter bypass valves that do not comply with the spring compression force limits contained in Avco Lycoming Textron SB No. ALF502R-79-0162, Original, dated March 23, 1987, must be removed and replaced with oil filter bypass valve, PN 2-303-432-02. Replacement of oil filter bypass valve, PN 2-303-432-01, with the improved oil filter bypass valve, PN 2-303-432-02, constitutes terminating action for the inspection requirements of paragraphs (c)(1) and (c)(2) of this AD.

Definition of a Shop Visit

(4) For the purpose of this AD, an engine shop visit is defined as engine maintenance that entails any of the following:

(i) Separation of a major engine flange (lettered or numbered) other than flanges mating with major sections of the nacelle reverser. Separation of flanges purely for purposes of shipment, without subsequent internal maintenance, is not a "shop visit."

(ii) Removal of a disk, hub, or spool.

(iii) Removal of the fuel nozzles.

(d) For ALF502R, ALF502L, LF507-1F, and LF507-1H series engines, equipped with the No. 4 and 5 duplex bearing assembly numbers 2-141-930-01, 2-141-930-02, or 2-141-930-03, perform the repetitive oil system maintenance and inspections in accordance with the intervals and procedures described in the Accomplishment Instructions paragraphs of the applicable AlliedSignal Inc. SBs referenced in paragraphs (d)(1), (d)(2), (d)(3), and (d)(4) of this AD, within the next 25 hours TIS or 25 flights in service, whichever occurs first, from the effective date of this AD.

(1) For ALF502R series engines, in accordance with AlliedSignal Inc. SB No. ALF502R 79-9, Revision 1, dated November 27, 1996.

(2) For ALF502L series engines, in accordance with AlliedSignal Inc. SB No. ALF502L 79-0171, Revision 1, dated November 27, 1996.

(3) For LF507-1F series engines, in accordance with AlliedSignal Inc. SB No. LF507-1F-79-5, Revision 1, dated November 27, 1996.

(4) For LF507-1H series engines, in accordance with AlliedSignal SB No. LF507-1H-79-5, Revision 1, dated November 27, 1996.

Modification of the No. 4 and 5 Duplex Bearing Assembly

(e) Modify the fourth turbine rotor disk assembly at the next access to the No. 4 and 5 duplex bearing assembly during the engine shop visit not to exceed 6,000 cycles in service (CIS) or 6,000 hours TIS, whichever occurs first, from the effective date of this AD, in accordance with the accomplishment instructions paragraph of AlliedSignal Inc. SB No. ALF/LF 72-1030, Revision 2, dated December 14, 1998.

(f) Modify the power turbine bearing housing assembly at the next access to the No. 4 and 5 duplex bearing assembly during the engine shop visit not to exceed 6,000 CIS or 6,000 hours TIS, whichever occurs first, from the effective date of this AD, in accordance with the accomplishment instructions paragraph of AlliedSignal Inc. SB No. ALF/LF 72-1040, Revision 1, dated December 14, 1998.

(g) Performance of the modifications described in paragraphs (e) and (f) of this AD constitutes terminating action to the rework and replacement requirements of paragraph (a), and the repetitive inspection requirements of paragraphs (b), (c), and (d) of this AD.

NOTE 3: Installation of a reworked or modified fourth turbine rotor disk assembly as a part of a design change to the new No. 4 bearing configuration that eliminates the requirements for repetitive inspections of oil system does not relieve the operators from accomplishment of the engine oil system inspection in accordance with the engine manufacturer's applicable maintenance documents.

Alternative Method of Compliance

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles Aircraft Certification Office.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Los Angeles Aircraft Certification Office.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Manufacturer Service Bulletins

(j) The inspections, modifications, and rework shall be done in accordance with the following AlliedSignal Inc. (formerly Textron Lycoming and Avco Lycoming) service bulletins:

Document No.	Pages	Revision	Date
ALF502-72-0008	All	1	October 14, 1980
Total Pages: 6			
ALF502-72-0010	All	Original	October 14, 1980
Total Pages: 8			
ALF/LF 72-1030	1-2	2	December 14, 1998
Total pages: 56	3	1	February 23, 1998
	4	2	December 14, 1998
	5	1	February 23, 1998
	6-7	2	December 14, 1998
	8-9	1	February 23, 1998
	10	2	December 14, 1998
	11-14	1	February 23, 1998
	15	2	December 14, 1998
	16-17	1	February 23, 1998
	18-55	2	December 14, 1998
	56 (blank)		
ALF/LF 72-1040	1-3	1	December 14, 1998
Total pages: 46	4-13	Original	October 20, 1997
	14-46	1	December 14, 1998

(k) The incorporation by reference of SB ALF 502R-72-0160, revision 2, dated May 26, 1987; ALF 502R-72-0160, revision 1, dated March 23, 1987; SB ALF502R 79-9 revision 1, dated November 27, 1996; SB ALF502L 79-0171, revision 1, dated November 27, 1997; SB ALF502R-79-0162, revision 2, dated September 8, 1987; SB ALF 502R-79-0162, revision 1, dated May 26, 1987; SB ALF502R-79-0162, dated March 23, 1987; SB LF507-1F-79-5, revision 1, dated November 27, 1996; SB LF507-1H-79-5, revision 1, dated November 27, 1996, was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 as of April 16, 1997.

Address for Obtaining Referenced Service Bulletins

(l) Copies may be obtained from AlliedSignal Aerospace, Attn: Data Distribution, M/S 64-3/2101-201, P.O. Box 29003, Phoenix, AZ 85038-9003; telephone (602) 365-2493, fax (602) 365-5577. Copies may be inspected at the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(m) This amendment becomes effective on April 27, 2000.

FOR FURTHER INFORMATION CONTACT:

Robert Baitoo, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; telephone 562-627-5245; fax 562-627-5210.

Issued in Burlington, Massachusetts, on March 6, 2000.

David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-18 AIRBUS INDUSTRIE: Amendment 39-11628. Docket 98-NM-211-AD.

Applicability: Model A300 series airplanes on which Airbus Modification 2140 (reference Airbus Service Bulletin A300-53-109) has been accomplished; and Model A310 and A300-600 series airplanes, except those airplanes on which Airbus Modification 5438 was accomplished during production; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracks in the door edge frames of the bulk cargo compartment, which could result in reduced structural integrity of the airframe, accomplish the following:

Repetitive Inspections

(a) Perform an eddy current inspection to detect cracking in the inner and outer flanges on the door edge frames of the fuselage bulk cargo compartment, in accordance with Airbus Service Bulletins A300-53-0339, Revision 01, including Appendix 01, dated July 28, 1998 (for Model A300 series airplanes); A310-53-2106, including Appendix 01, dated October 2, 1997; or A310-53-2106, Revision 01, including Appendix 01, dated July 28, 1998 (for Model A310 series airplanes); A300-53-6114, including Appendix 01, dated October 2, 1997; or A300-53-6114, Revision 01, including Appendix 01, dated July 28, 1998 (for Model A300-600 series airplanes); as applicable; at the applicable time specified in paragraph (a)(1) or (a)(2) of this AD. Thereafter, repeat the inspection at intervals not to exceed 5 years.

(1) For airplanes with less than 15 years since date of manufacture as of the effective date of this AD: Inspect within 10 years since date of manufacture, or within 12 months after the effective date of this AD, whichever occurs later.

(2) For airplanes with 15 or more years since date of manufacture as of the effective date of this AD: Inspect within 6 months after the effective date of this AD.

NOTE 2: For Model A300 series airplanes, accomplishment of an eddy current inspection prior to the effective date of this AD in accordance with Airbus Service Bulletin A300-53-0339, dated October 2, 1997, is considered acceptable for compliance with the initial eddy current inspection required by paragraph (a) of this AD.

Corrective Actions

(b) If any crack is detected during any inspection required by paragraph (a) of this AD, prior to further flight, repair the door edge frame in accordance with Airbus Service Bulletins A300-53-0339, Revision 01, including Appendix 01, dated July 28, 1998 (for Model A300 series airplanes); A310-53-2106, including Appendix 01, dated October 2, 1997; or A310-53-2106, Revision 01, including Appendix 01, dated July 28, 1998, (for Model A310 series airplanes); A300-53-6114, including Appendix 01, dated October 2, 1997; or A300-53-6114, Revision 01, including Appendix 01, dated July 28, 1998 (for Model A300-600 series airplanes); as applicable. Complete replacement of a door edge frame with a new door frame in accordance with the service bulletin constitutes terminating action for the repetitive inspections required by this AD for that door frame only.

Report Requirements

(c) Submit a report of the inspection results (both positive and negative findings) to Airbus Industrie, Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, at the applicable time specified in paragraph (e)(1) or (e)(2) of this AD. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) For airplanes on which any inspection is accomplished after the effective date of this AD: Submit the report within 30 days after performing any inspection required by paragraph (a) or (b) of this AD.

(2) For airplanes on which the inspection has been accomplished prior to the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with Airbus Service Bulletin A300-53-0339, Revision 01, including Appendix 01, dated July 28, 1998; Airbus Service Bulletin A310-53-2106, including Appendix 01, dated October 2, 1997; Airbus Service Bulletin A310-53-2106, Revision 01, including Appendix 01, dated July 28, 1998; Airbus Service Bulletin A300-53-6114, including Appendix 01, dated October 2, 1997; or Airbus Service Bulletin A300-53-6114, Revision 01, including Appendix 01, dated July 28, 1998; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in French airworthiness directive 98-123-245(B), dated March 11, 1998.

(g) This amendment becomes effective on April 24, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 8, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-19 BOEING: Amendment 39-11629. Docket 99-NM-73-AD.

Applicability: All Model 727 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking of the fuselage skin and bonded doubler area above the forward entry doorway, which could result in reduced structural integrity and consequent loss of cabin pressurization, accomplish the following:

Detailed Visual Inspection

(a) Prior to the accumulation of 60,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later: Perform a one-time detailed visual inspection of the fuselage skin and bonded doubler area above the forward entry doorway to detect fatigue cracking or the existence of a previous repair, in accordance with Boeing Service Bulletin 727-53-0186, Revision 1, dated May 21, 1992.

Corrective Action

(1) If no crack or repair is detected, prior to further flight, perform the preventive modification in accordance with the service bulletin. No further action is required by this AD.

(2) If any crack but no repair is detected, prior to further flight, accomplish the actions required by paragraph (a)(2)(i), (a)(2)(ii), or (a)(2)(iii), as applicable.

(i) If any crack is less than or equal to 2.5 inches, perform the full-sized repair doubler in accordance with Boeing Service Bulletin 727-53-0186, Revision 1, dated May 21, 1992. Accomplishment of this action constitutes terminating action for the requirements of this AD.

(ii) If any crack exceeds 2.5 inches, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, or the Boeing DER, as required by this paragraph, the approval letter must specifically reference this AD.

(iii) If any crack in the bear strap is detected, repair in accordance with a method approved by the Manager, Seattle ACO; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, or the Boeing DER, as required by this paragraph, the approval letter must specifically reference this AD.

(3) If any repair is found, accomplish paragraph (a)(3)(i), (a)(3)(ii), or (a)(3)(iii), of this AD, as applicable.

(i) If a full-sized repair doubler is found, as specified by Boeing Service Bulletin 727-53-0186, dated April 27, 1989, or Revision 1, dated May 21, 1992, and any crack is less than or equal to 2.5 inches, no further action is required by this AD.

(ii) If a half-sized repair doubler is found, as specified by Boeing Service Bulletin 727-53-0186, dated April 27, 1989, or Revision 1, dated May 21, 1992, and any crack is less than or equal to 2.5 inches and is not in the bear strap: Prior to further flight, perform the full-sized repair doubler in accordance with Boeing Service Bulletin 727-53-0186, Revision 1, dated May 21, 1992. No further action is required by this AD.

(iii) If a half-sized or full-sized repair doubler is found, as specified by the service bulletin, and any crack exceeds 2.5 inches or is located in the bear strap: Prior to further flight, repair in accordance with a method approved by the Manager, Seattle ACO or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, or the Boeing DER, as required by this paragraph, the approval letter must specifically reference this AD.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate by the inspector. Inspection aids such as mirrors, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

Terminating Action for AD 94-05-04

(b) Accomplishment of the requirements of this AD constitutes terminating action for the requirements of paragraph (a) of AD 94-05-04, amendment 39-8842 (which are required to be accomplished in accordance with Appendices A.3, B.3, and C.3 of Boeing Document Number D6-54860, "Aging Airplane Service Bulletin Structural Modification and Inspection Program--Model 727," Revision G, dated March 5, 1993), with respect to the modification specified in Boeing Service Bulletin 727-53-0186, dated April 27, 1989. All other service bulletins referenced in Boeing Document Number D6-54860 still apply.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) Except as provided by paragraphs (a)(2)(ii), (a)(2)(iii), and (a)(3)(iii) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 727-53-0186, Revision 1, dated May 21, 1992. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on April 24, 2000.

FOR FURTHER INFORMATION CONTACT:

Walter Sippel, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2774; fax(425) 227-1181.

Issued in Renton, Washington, on March 8, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**DASSAULT AVIATION
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-20 DASSAULT AVIATION [Formerly Avions Marcel Dassault-Breguet Aviation (AMD/BA)]: Amendment 39-11630. Docket 99-NM-319-AD.

Applicability: Model Fan Jet Falcon airplanes, Model Mystere-Falcon 20, 50, 200, and 900 series airplanes, and Model Falcon 10, 900EX, and 2000 series airplanes; equipped with EROS passenger oxygen masks, part number (P/N) MW 37-09, MW 37-11, MW 37-14, MW 37-18, MW 37-28, MW 37-31, or MW 37-36; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure that proper plastic bags of the passenger oxygen masks are installed, and that the masks are functioning properly, accomplish the following:

(a) Within 10 flights after the effective date of this AD, perform a functional test of the passenger oxygen masks in accordance with Chapter 5 (ATA Code 35) of the airplane maintenance manual (AMM) for the affected airplanes, as applicable; and determine the P/N of the installed oxygen mask bags.

Corrective Actions

(b) If any Scott oxygen mask bag, P/N 289-801-235, is installed, prior to further flight, accomplish either paragraph (b)(1) or (b)(2) of this AD.

(1) Replace the bag with a new bag, P/N 289-601-235, in accordance with Chapter 5 (ATA Code 35) of the AMM for the affected airplanes, as applicable.

(2) Render any affected seat inoperative, and within 30 days after rendering the affected seat inoperative, accomplish the action specified in paragraph (b)(1) of this AD.

(c) If any discrepancy is detected during the functional test required by paragraph (a) of this AD, prior to further flight, repair the discrepancy in accordance with Chapter 5 (ATA Code 35) of the AMM for the affected airplanes, as applicable.

Spares

(d) As of the effective date of this AD, no person shall install a SCOTT oxygen mask bag, P/N 289-801-235, on any airplane.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

NOTE 3: The subject of this AD is addressed in French airworthiness directives 1999-270-025(B), dated June 30, 1999 (for Model Jet Falcon series airplanes, and Model Mystere-Falcon 20 and 200 series airplanes); 1999-271-026(B), dated June 30, 1999 (for Model Mystere-Falcon 50 and 900 series airplanes, and Model Falcon 900EX series airplanes); 1999-267-010(B), dated June 30, 1999 (for Model Falcon 2000 series airplanes); and 1999-269-024(B), dated June 30, 1999 (for Model Falcon 10 series airplanes).

(g) This amendment becomes effective on April 18, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 8, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-21 AIRBUS INDUSTRIE: Amendment 39-11631. Docket 99-NM-349-AD.

Applicability: Model A319, A320, A321, A330, and A340 series airplanes, certificated in any category, as follows:

- Model A319, A320, and A321 series airplanes on which Airbus Modification 28578 (Airbus Service Bulletin A320-34-1191, dated July 12, 1999), or Airbus Modification 28579 (Airbus Service Bulletin A320-34-1196, dated July 15) has not been accomplished; equipped with a LITTON Global Positioning Satellite Signal Unit (GPSSU) having Part Number (P/N) 465205-0302-0303 installed in accordance with Airbus Service Bulletin A320-34-1119 (Airbus Modification 23885).
- Model A330 series airplanes on which Airbus Modification 46961 (Airbus Service Bulletin A330-34-3082, Revision 01, dated September 28, 1999), or Airbus Modification 47327 (Airbus Service Bulletin A330-34-3086, Revision 01, dated September 28, 1999) has not been accomplished; equipped with a LITTON GPSSU having P/N 465205-0302-0302 or 465205-0302-0303.
- Model A340 series airplanes on which Airbus Modification 46961 (Airbus Service Bulletin A340-34-4089, Revision 01, dated September 28, 1999), or Airbus Modification 47327 (Airbus Service Bulletin A340-34-4092, Revision 01, dated September 28, 1999) has not been accomplished; equipped with a LITTON GPSSU having P/N 465205-0302-0302 or 465205-0302-0303.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent position and altitude errors due to bad oscillator warm-up characteristics of the GPSSU, which could result in navigational errors that may exceed 0.5 nautical mile, accomplish the following:

AFM Revision

(a) Within 10 days after the effective date of this AD, revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following procedures. This may be accomplished by inserting a copy of this AD in the AFM.

“Operation:

- GPS Stand-alone and GPS overlay non-precision approaches are not allowed.
- The GPS must be deselected before non-precision approach.
- The GPS must be deselected for the remainder of the flight if ‘NAV FM/GPS POS DISAGREE’

ECAM warning is triggered (in all phases of flight).

Dispatch:

- If one GPS is inoperative, GPS must be deselected.”

NOTE 2: The AFM revision may be accomplished by inserting a copy of Airbus Temporary Revision (TR) 2.05.00/40 (for Model A319, A320, and A321 series airplanes); TR 2.05.00/38 (for Model A330 series airplanes); or TR2.05.00/47 (for A340 series airplanes); into the applicable AFM.

Modification

(b) Within 2 months after the effective date of this AD, modify the GPSSU of the satellite navigational system, in accordance with (b)(1), (b)(2), or (b)(3) of this AD, as applicable. After accomplishment of the modification, the AFM revision required by paragraph (a) of this AD may be removed from the AFM.

(1) For Model A319, A320, and A321 series airplanes: Modify the GPSSU in accordance with either Airbus Service Bulletin A320-34-1191, dated July 12, 1999, or Airbus Service Bulletin A320-34-1196, dated July 15, 1999.

(i) If modification of the GPSSU is accomplished in accordance with Airbus Service Bulletin A320-34-1191, prior to or concurrent with accomplishment of the modification, accomplish either Airbus Service Bulletin A320-34-1119, Revision 02, dated April 30, 1997, or A320-34-1196, dated July 15, 1999.

(ii) If modification of the GPSSU is accomplished in accordance with Airbus Service Bulletin A320-34-1196, prior to or concurrent with accomplishment of the modification, accomplish Airbus Service Bulletin A320-34-1119, Revision 02, dated April 30, 1997.

(2) For Model A330 series airplanes: Modify the GPSSU in accordance with either Airbus Service Bulletin A330-34-3082, Revision 01, dated September 28, 1999, or Airbus Service Bulletin A330-34-3086, Revision 01, dated September 28, 1999.

(i) If modification of the GPSSU is accomplished in accordance with Airbus Service Bulletin A330-34-3082, Revision 01, prior to or concurrent with accomplishment of the modification, accomplish either Airbus Service Bulletin A330-34-3015, dated April 3, 1995, or Airbus Service Bulletin A330-34-3086, Revision 01, dated September 28, 1999.

(ii) If modification of the GPSSU is accomplished in accordance with Airbus Service Bulletin A330-34-3086, Revision 01, prior to or concurrent with accomplishment of the modification, accomplish Airbus Service Bulletin A330-34-3015, dated April 3, 1995.

(3) For Model A340 series airplanes: Modify the GPSSU in accordance with either Airbus Service Bulletin A340-34-4089, Revision 01, dated September 28, 1999, or Airbus Service Bulletin A340-34-4092, Revision 01, dated September 28, 1999.

(i) If modification of the GPSSU is accomplished in accordance with Airbus Service Bulletin A340-34-4089, Revision 01, prior to or concurrent with accomplishment of the modification, accomplish either Airbus Service Bulletin A340-34-4022, dated April 3, 1995, or Airbus Service Bulletin A340-34-4092, Revision 01, dated September 28, 1999.

(ii) If modification of the GPSSU is accomplished in accordance with Airbus Service Bulletin A340-34-4092, Revision 01, prior to or concurrent with accomplishment of the modification, accomplish either Airbus Service Bulletin A340-34-4022, dated April 3, 1995, or Airbus Service Bulletin A340-34-4078, Revision 01, dated November 26, 1999, including Appendix 01, dated November 26, 1999.

NOTE 3: The Airbus service bulletins reference LITTON Service Bulletin 2001-34-13, dated July 8, 1999, and LITTON Service Bulletin 2001-34-14, dated July 5, 1999, as additional sources of service information for modifying the GPSSU.

(c) As of the effective date of this AD, no person shall install on any airplane a GPSSU having P/N 465205-0302-0302 or 465205-0302-0303.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance and Operations Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(f) Except as provided by paragraph (a) of this AD, the actions shall be done in accordance with Airbus Service Bulletin A320-34-1191, dated July 12, 1999; Airbus Service Bulletin A320-34-1196, dated July 15, 1999; Airbus Service Bulletin A320-34-1119, Revision 02, dated April 30, 1997; Airbus Service Bulletin A330-34-3082, Revision 01, dated September 28, 1999; Airbus Service Bulletin A330-34-3086, Revision 01, dated September 28, 1999; Airbus Service Bulletin A330-34-3015, dated April 3, 1995; Airbus Service Bulletin A340-34-4089, Revision 01, dated September 28, 1999; Airbus Service Bulletin A340-34-4022, dated April 3, 1995; Airbus Service Bulletin A340-34-4092, Revision 01, dated September 28, 1999; or Airbus Service Bulletin A340-34-4078, Revision 01, including Appendix 01, dated November 26, 1999; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in French airworthiness directives 1999-361-138(B), dated September 8, 1999; 1999-354-101(B), dated September 8, 1999; and 1999-355-123(B), dated September 8, 1999; in order to assure the continued airworthiness of these airplanes in France.

(g) This amendment becomes effective on April 27, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 8, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**HONEYWELL INTERNATIONAL INC
AIRWORTHINESS DIRECTIVE
APPLIANCE
LARGE AIRCRAFT**

2000-05-24 HONEYWELL INTERNATIONAL INC.: Amendment 39-11634; Docket No. 2000-CE-11-AD.

(a) What aircraft are affected by this AD?: Any aircraft, certificated in any category, that is equipped with a Honeywell KAP 140 or KFC 225 autopilot system and incorporates any autopilot servo actuator referenced in the Honeywell service information and the chart presented below. AlliedSignal Avionics Inc. manufactured the KAP 140 and KFC 225 autopilot systems before transferring the design data to Honeywell:

Service Bulletin No.:	Date:	Applies To:
SB KS 270C-4 ALERT Part number (P/N): 600-01514-0041	Revision 1: February/2000	KS 270C Pitch Servo Actuators, P/N 065-00178-XXXX (all versions), serial numbers (S/N) 2701 and below.
SB KS 271C-5 ALERT P/N: 600-01516-0051	Revision 1: February/2000	KS 271C Primary Servo Actuators, P/N 065-00179-XXXX (all versions), S/N 4201, 4158 through 4148, and 4103 and below.
SB KS 272C-4 ALERT P/N: 600-01518-0042	Revision 2: February/2000	KS 272C Trim Servo Actuators, P/N 065-00180-XXXX (all versions), S/N 2435 and below.

(b) Who must comply with this AD?: Anyone who wishes to operate an aircraft on the U.S. Register, where the aircraft incorporates one of the above-referenced autopilot servo actuators. These autopilot systems and autopilot servo actuators could be installed on, but not limited to, the following aircraft:

Type Certificate Holder	Aircraft Models	Autopilot Installed
Cessna Aircraft Company	172R, 172S, 182S, 206H, and T206H airplanes	Model KAP 140
Commander Aircraft Company	114B and 114TC airplanes	Model KFC 225
Mooney Aircraft Corporation	M20R and M20S airplanes	Model KFC 225
The New Piper Aircraft, Inc.	PA-28-181 airplanes	Model KAP 140
The New Piper Aircraft, Inc.	PA-46-350P airplanes	Model KFC 225
Raytheon Aircraft Company	Beech A36 airplanes, S/N E3157, E3218 through E3293, E3295, and E3297 through E3301	Model KFC 225
Raytheon Aircraft Company	Beech B36TC airplanes, S/N EA611, EA620, EA629 through EA649, and EA651	Model KFC 225
Raytheon Aircraft Company	Beech 58 airplanes, S/N TH1841, TH1870, TH1884 through TH1932, and TH1934	Model KFC 225

(c) What problem does this AD address?: The actions specified by this AD are intended to detect and correct a loose fastener in an autopilot servo actuator, which could cause the autopilot servo actuator to not disengage when power to the autopilot is removed. This could cause the pilot to experience additional control forces.

(d) What must I do to address this problem?: To address this problem, you must accomplish the following:

Action	When	In Accordance With
Inspect the autopilot servo actuator for a loose fastener.	Within 15 hours time-in-service after the effective date of this AD.	The applicable service information referenced in paragraph (a) of this AD.
Modify the autopilot servo actuator when a loose fastener is found.	Prior to further flight after the required inspection.	The applicable service information referenced in paragraph (a) of this AD.

(e) Is it permissible to just not use the autopilot since it is optional equipment?: You may do this provided you accomplish the following:

- (1) Check the primary flight controls for normal feel and motion and make any necessary adjustments;
 - (2) Pull and tie off the applicable circuit breakers as referenced in the Compliance section of the applicable service information referenced in paragraph (a) of this AD;
 - (3) Fabricate a placard, using letters of 1/8-inch in height, with the words "Autopilot Not Operational"; and
 - (4) Install this placard in the cockpit within the pilot's clear view.
- (f) Can I comply with this AD in any other way?: Yes.
- (1) You may use an alternative method of compliance or adjust the compliance time if:

- (i) Your alternative method of compliance provides an equivalent level of safety; and
- (ii) The Manager, Wichita Aircraft Certification Office (ACO), approves your alternative.

Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

(2) This AD applies to each aircraft identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For aircraft that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(g) Where can I get information about any already-approved alternative methods of compliance?: Contact Clyde Erwin, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4149; facsimile: (316) 946-4407.

(h) What if I need to fly the aircraft to another location to comply with this AD?: The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your aircraft to a location where you can accomplish the requirements of this AD.

(i) Are any service bulletins incorporated into this AD by reference?: Yes. Actions required by this AD must be done in accordance with Honeywell Service Bulletin No. SB KS 270C-4 ALERT, P/N: 600-01514-0041, Revision 1: February/2000, Honeywell Service Bulletin No. SB KS 271C-5 ALERT, P/N: 600-01516-0051, Revision 1: February/2000, or Honeywell Service Bulletin No. SB KS 272C-4 ALERT, P/N: 600-01518-0042, Revision 2: February/2000. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Honeywell International Inc., 23500 West 105th Street, Olathe, Kansas 66061. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(j) When does this amendment become effective?: This amendment becomes effective on April 12, 2000.

FOR FURTHER INFORMATION CONTACT:

Clyde Erwin, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4149; facsimile: (316) 946-4407.

Issued in Kansas City, Missouri, on March 6, 2000.

Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.

**BRITISH AEROSPACE REGIONAL AIRCRAFT
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-25 BRITISH AEROSPACE REGIONAL AIRCRAFT (Formerly British Aerospace Regional Aircraft Limited, Avro International Aerospace Division; British Aerospace, PLC; British Aerospace Commercial Aircraft Limited): Amendment 39-11635. Docket 98-NM-174-AD. Supersedes AD 96-14-09, Amendment 39-9694.

Applicability: Model BAe 146-100A, -200A, and -300A series airplanes, certificated in any category; equipped with AlliedSignal ALF502R- series engines.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent engine power rollback during flight in icing conditions, a condition that could result in insufficient power to sustain flight, accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 96-14-09, AMENDMENT 39-9694

Placard Installation

(a) For airplanes listed in British Aerospace Service Bulletin SB.11-97-01285A, Revision 1, dated April 3, 1992: Within 30 days after December 17, 1992 (the effective date of AD 92-24-09, amendment 39-8415), install a placard below the ice protection switches on the flight deck overhead panel to include additional procedures to be followed when operating at certain flight levels with the engine and airframe anti-ice switch ON, in accordance with British Aerospace Service Bulletin SB.11-97-01285A, Revision 1, dated April 3, 1992.

Modification

(b) For airplanes listed in British Aerospace Service Bulletin SB.11-97-01285A, Revision 1, dated April 3, 1992: Within 30 days after December 17, 1992 (the effective date of AD 92-24-09, amendment 39-8415), modify the air brake auto-retract function, in accordance with British Aerospace Service Bulletin SB.11-97-01285A, Revision 1, dated April 3, 1992.

Airplane Flight Manual Revision

(c) Within 6 days after July 22, 1996 (the effective date of AD 96-14-09, amendment 39-9694), amend the FAA-approved Airplane Flight Manual (AFM) as required by paragraphs (c)(1) and (c)(2) of this AD.

(1) Remove the following Temporary Revisions (TR) from the Limitations Section and Normal/Abnormal Procedures Section, as applicable:

(i) For Model BAe 146-100A series airplanes: TR 30, Issue No. 2 (Document No. BAe 3.3), dated February 1994.

(ii) For Model BAe 146-200A series airplanes: TR 41, Issue No. 2 (Document No. BAe 3.3), dated February 1994, or TR 42, Issue No. 2 (Document No. BAe 3.3), dated February 1994, as applicable.

(iii) For Model BAe 146-300A series airplanes: TR 23, Issue No. 2 (Document No. BAe 3.3), dated February 1994.

(2) Insert the following TR's into the Limitations Section and the Normal/Abnormal Procedures/Handling Section, as applicable.

(i) For Model BAe 146-100A series airplanes: TR 32, Issue No. 2 (Document BAe 3.3), dated July 1996.

(ii) For Model BAe 146-200A series airplanes: TR 44, Issue No. 2 (Document BAe 3.6), dated July 1996.

(iii) For Model BAe 146-300A series airplanes: TR 25, Issue No. 2 (Document BAe 3.11), dated July 1996.

(d) When the TR's specified in paragraph (c)(2) have been incorporated into an AFM General Revision, the applicable AFM General Revision may be inserted into the corresponding FAA-approved AFM, provided the information contained in the AFM General Revision corresponds identically to that specified in TR 32, TR 44, or TR 25.

NEW REQUIREMENTS OF THIS AD

Placard Installation

(e) Within 30 days after the effective date of this AD, install a placard on the flight deck to indicate that a 26,000 feet altitude limitation in icing is applicable, and replace the ice protection panel placard with a new placard for N2 limitations, in accordance with British Aerospace Service Bulletin SB.11-137-30405A, dated March 26, 1998. Upon accomplishment of this placard installation, the placard required by paragraph (a) of this AD may be removed.

Terminating Modification (Including Modification Required by AD 99-15-06)

(f) Modification of all four engines [i.e., reduction of the length core-flow/fan-flow splitter (cut-back splitter); modification of the splitter lip insulating baffle; installation of a heated exit guide vane (EGV); relocation of the engine anti-ice air source to the combustor bleed plenum; installation of a new anti-ice valve with improved couplings; and installation of improved insulated connections], and insertions of AFM revisions, in accordance with British Aerospace Service Bulletin SB.71-72-30473A, dated July 8, 1998, or Revision 1, dated November 2, 1998; constitutes terminating action for the requirements of this AD. After the modification is accomplished, the AFM revisions and placards required by paragraphs (c), (d), and (e) of this AD may be removed.

NOTE 2: British Aerospace Service Bulletin SB.71-72-30473A, dated July 8, 1998, and Revision 1, dated November 2, 1998, only describe procedures for installation of engines that have been modified in accordance with the requirements of AD 99-15-06, amendment 39-11225.

Alternative Methods of Compliance

(g) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

(2) Alternative methods of compliance, approved previously in accordance with AD 96-14-09, amendment 39-9694, are approved as alternative methods of compliance with this AD.

Special Flight Permits

(h) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(i) The actions shall be done in accordance with British Aerospace Service Bulletin SB.11-97-01285A, Revision 1, dated April 3, 1992; Airplane Flight Manual Temporary Revision 32, Issue No. 2 (Document BAe 3.3), dated July 1996; Airplane Flight Manual Temporary Revision 44, Issue No. 2 (Document BAe 3.6), dated July 1996; Airplane Flight Manual Temporary Revision 25, Issue No. 2 (Document BAe 3.11), dated July 1996; and British Aerospace Service Bulletin SB.11-137-30405A, dated March 26, 1998; as applicable.

(1) The incorporation by reference of British Aerospace Service Bulletin SB.11-137-30405A, dated March 26, 1998, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of British Aerospace Service Bulletin SB.11-97-01285A, Revision 1, dated April 3, 1992, was approved previously by the Director of the Federal Register as of December 17, 1992 (57 FR 53548, November 12, 1992).

(3) The incorporation by reference of Airplane Flight Manual Temporary Revision 32, Issue No. 2 (Document BAe 3.3), dated July 1996; Airplane Flight Manual Temporary Revision 44, Issue No. 2 (Document BAe 3.6), dated July 1996; and Airplane Flight Manual Temporary Revision 25, Issue No. 2 (Document BAe 3.11), dated July 1996; was approved previously by the Director of the Federal Register as of July 22, 1996 (61 FR 37199, July 17, 1996).

(4) Copies may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in British airworthiness directives 004-03-98 and 003-06-96, Revision 1.

(j) This amendment becomes effective on April 24, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 8, 2000.

Franklin Tiangsing, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**AEROSPATIALE
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-26 AEROSPATIALE: Amendment 39-11636. Docket 98-NM-94-AD. Supersedes AD 93-18-04, Amendment 39-8689.

Applicability: All Model ATR42-200, ATR42-300, and ATR42-320 series airplanes; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracks of the cargo door skin, certain frames, entry door stop fittings, or friction plates, which could result in reduced structural integrity of the airplane, accomplish the following:

Frame 25 and 27 Inspection

(a) For airplanes having serial numbers 005 through 016 inclusive, 018 through 030 inclusive, 032 through 036 inclusive, 038, 040, 042, 043, 048 through 062 inclusive, 064 through 090 inclusive, 092 through 094 inclusive, and 096 through 228 inclusive: Prior to the accumulation of 36,000 total flight cycles, or within 180 days after the effective date of this AD, whichever occurs later, conduct a general visual inspection of fuselage frames 25 and 27 to verify the proper installation of a rivet in each of the key holes, in accordance with Avions de Transport Regional (ATR) Service Bulletin ATR42-53-0070, Revision 2, dated March 22, 1993, or Revision 3, dated February 19, 1999.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being check."

NOTE 3: Inspection of fuselage frames 25 and 27 accomplished prior to the effective date of this AD in accordance with ATR Service Bulletin ATR42-53-0070, dated June 10, 1991, or Revision 1, dated June 12, 1992, is considered acceptable for compliance with the requirements of paragraph (a) of this AD.

(1) If a rivet is installed in each of the key holes, no further action is required by this paragraph.

(2) If a rivet is not installed in each of the key holes, prior to further flight, perform an eddy current inspection of each open key hole to detect cracks, in accordance with the service bulletin.

(i) If no crack is found during the eddy current inspection, prior to further flight, install a rivet in the open key hole in accordance with the service bulletin. After such installation, no further action is required by this paragraph for that key hole.

(ii) If any crack is found during the eddy current inspection, prior to further flight, repair the crack in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Inspection and Modification of Cargo Door Structure

(b) For airplanes equipped with a cargo compartment door on which Aerospatiale Modification 3191 has not been accomplished: Prior to the accumulation of 27,000 total flight cycles, or within 180 days after the effective date of this AD, whichever occurs later, except as provided by paragraph (c) of this AD, replace the hinges on the cargo compartment door and fuselage (including inspections for fastener type and tolerances, hole diameters, or cracking, and repair; as applicable) with new improved hinges, in accordance with paragraph 2. of the Accomplishment Instructions of ATR Service Bulletin ATR42-52-0058, Revision 1, dated March 1, 1995.

(c) Where the instructions in ATR Service Bulletin ATR42-52-0058, Revision 1, dated March 1, 1995, specify that ATR is to be contacted for a repair, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116, or the DGAC (or its delegated agent).

Frame Inspection

(d) For airplanes having serial numbers 003 through 208 inclusive: Prior to the accumulation of 36,000 total flight cycles, or within 180 days after the effective date of this AD, whichever occurs later, conduct a general visual inspection of the identified fuselage frames for proper installation of a rivet in each of the tooling and key holes, in accordance with ATR Service Bulletin ATR42-53-0076, Revision 2, dated October 15, 1996, or Revision 3, dated February 19, 1999.

(1) If a rivet is installed in each of the tooling or key holes, no further action is required by this paragraph.

(2) If a rivet is not installed in each of the tooling and key holes, prior to further flight, perform a detailed visual inspection of each open tooling or key hole to detect cracks, in accordance with the service bulletin.

NOTE 4: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

(i) If no crack is found during the detailed visual inspection required by paragraph (d)(2) of this AD, prior to further flight, install a rivet in the open hole in accordance with the service bulletin.

(ii) If any crack is found during the visual inspection required by paragraph (d)(2) of this AD, prior to further flight, repair the crack in accordance with a method approved by the Manager, International Branch, ANM-116, or the DGAC (or its delegated agent).

Inspection and/or Replacement of Entry Door Structure

(e) For Model ATR42-300 series airplanes having serial numbers listed in ATR Service Bulletin ATR42-52-0052, Revision 1, dated March 2, 1993: Except as provided by paragraph (f) of this AD, prior to the accumulation of 10,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraphs (e)(1) and (e)(2) of this AD.

(1) Perform an eddy current inspection of the forward entry door stop holes to detect cracking, in accordance with the service bulletin. If any cracking is detected, prior to further flight, replace any cracked forward entry door stop fitting with a new fitting, in accordance with the service bulletin.

(2) Perform a detailed visual inspection of the forward entry door friction plates for wear, in accordance with the service bulletin. If wear is found on any friction plate, and the wear has a depth equal to or greater than 0.8mm (0.0315 in.), prior to further flight, replace the friction plate with a new or serviceable part in accordance with the service bulletin.

(f) For Model ATR42-300 series airplanes listed in ATR Service Bulletin ATR42-52-0052, Revision 1, dated March 2, 1993, accomplishment of the requirements of paragraph (g) of this AD at the time specified in paragraph (e) of this AD constitutes terminating action for the requirements of paragraph (e) of this AD.

(g) For Model ATR42-300 series airplanes listed in ATR Service Bulletin ATR42-52-0059, dated February 16, 1995: Prior to the accumulation of 18,000 total flight cycles, or within 180 days after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraphs (g)(1), (g)(2), and (g)(3) of this AD in accordance with the service bulletin.

(1) Replace the forward entry door friction plates with improved friction plates.

(2) Replace the upper corners of the forward entry door surround structure with improved door surround corners.

(3) Replace the forward entry door stop fittings and bolts with improved fittings and bolts.

Alternative Methods of Compliance

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as required by paragraphs (a)(2)(ii), (c), and (d)(2)(ii) of this AD, the actions shall be done in accordance with the following Avions de Transport Regionale service bulletins, as applicable:

Service Bulletin Referenced and Date	Page Number	Revision Level Shown on Page	Date Shown on Page
ATR42-53-0070, Revision 2	1, 2, 9	2	March 22, 1993
March 22, 1993	3-7, 10-12	1	June 12, 1992
	8, 13	Original	June 10, 1991

Service Bulletin Referenced and Date	Page Number	Revision Level Shown on Page	Date Shown on Page
ATR42-53-0070, Revision 3, February 19, 1999	1-6, 9	3	February 19, 1999
	7, 10-12	1	June 12, 1992
	8, 13	Original	June 10, 1991
ATR42-52-0058, Revision 1 March 1, 1995	1-117 39-99 (These pages are not used)	1	March 1, 1995
ATR42-53-0076, Revision 2 October 15, 1996	1-6	2	October 15, 1996
	7, 8, 11, 12, 17-19	1	November 4, 1994
	9, 10, 13-16	Original	May 13, 1993
ATR42-53-0076, Revision 3 February 19, 1999	1-6	3	February 19, 1999
	7, 8, 11, 12, 17-19	1	November 4, 1994
	9, 10, 13-16	Original	May 13, 1993
ATR42-52-0052, Revision 1 March 2, 1993	1-4, 9, 10	1	March 2, 1993
	5-8, 11-17	Original	January 11, 1991
ATR42-52-0059 February 16, 1995	1-43	Original	February 16, 1995

(1) The incorporation by reference of Avions de Transport Regionale Service Bulletin ATR42-53-0070, Revision 3, dated February 19, 1999; Avions de Transport Regionale Service Bulletin ATR42-52-0058, Revision 1, dated March 1, 1995; Avions de Transport Regionale Service Bulletin ATR42-53-0076, Revision 2, dated October 15, 1996; Avions de Transport Regionale Service Bulletin ATR42-53-0076, Revision 3, dated February 19, 1999; Avions de Transport Regionale Service Bulletin ATR42-52-0052, Revision 1, dated March 2, 1993; and Avions de Transport Regionale Service Bulletin ATR42-52-0059, dated February 16, 1995; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Avions de Transport Regionale Service Bulletin ATR42-53-0070, Revision 2, dated March 22, 1993, was approved previously by the Director of the Federal Register as of November 18, 1993 (58 FR 53853, October 19, 1993).

(3) Copies may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 6: The subject of this AD is addressed in French airworthiness directive 92-044-046(B)R2, dated November 5, 1997.

(k) This amendment becomes effective on April 26, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 9, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BRITISH AEROSPACE REGIONAL AIRCRAFT
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-27 BRITISH AEROSPACE REGIONAL AIRCRAFT (Formerly British Aerospace Regional Aircraft Limited, Avro International Aerospace Division; British Aerospace, PLC; British Aerospace Commercial Aircraft Limited): Amendment 39-11637. Docket 99-NM-237-AD. Supersedes AD 98-21-06, Amendment 39-10814.

Applicability: Model BAe 146-100A, -200A, and -300A series airplanes; as listed in British Aerospace Service Bulletin SB.53-144, dated April 27, 1998, or Revision 1, dated May 21, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the fuselage skin in the vicinity of frame 29 between stringers 12 and 13, which could result in reduced structural integrity of the airplane, accomplish the following:

Inspections

(a) Perform either a non-destructive test (NDT) inspection or a detailed visual inspection for cracking of the fuselage skin in the vicinity of frame 29 between stringers 12 and 13, in accordance with British Aerospace Service Bulletin SB.53-144, dated April 27, 1998, or Revision 1, dated May 21, 1999, at the earlier of the applicable times specified in paragraphs (a)(1) and (a)(2).

NOTE 2: The actions defined in the original issue and Revision 1 of the service bulletin are identical. However, the compliance times and effectivity groupings are different. Accomplishment of either revision level, at the earlier of the applicable compliance times of paragraphs (a)(1) and (a)(2) of this AD, is acceptable for compliance with the requirements of paragraph (a) of this AD.

NOTE 3: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) For airplanes identified in the specified paragraph of Service Bulletin SB.53-144, dated April 27, 1998:

(i) Paragraph 1.D.(1)(a): Inspect prior to the accumulation of 12,000 total flight cycles, or within 1,000 flight cycles after November 10, 1998 (the effective date of AD 98-21-06, amendment 39-10814), whichever occurs later.

(ii) Paragraph 1.D.(1)(b): Inspect prior to the accumulation of 16,000 total flight cycles, or within 1,200 flight cycles after November 10, 1998, whichever occurs later.

(iii) Paragraph 1.D.(1)(c): Inspect prior to the accumulation of 13,500 total flight cycles, or within 1,000 flight cycles after November 10, 1998, whichever occurs later.

(iv) Paragraph 1.D.(1)(d): Inspect prior to the accumulation of 22,000 total flight cycles, or within 1,400 flight cycles after November 10, 1998, whichever occurs later.

(2) For airplanes in the applicable configuration specified in Table 1 of Service Bulletin SB.53-144, Revision 1, dated May 21, 1999:

(i) For Model BAe 146-100 airplanes on which Modification HCM00020P has not been accomplished: Inspect prior to the accumulation of 11,600 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever occurs later.

(ii) For Model BAe 146-100 airplanes on which Modification HCM00020P has been accomplished: Inspect prior to the accumulation of 14,500 total flight cycles, or within 1,200 flight cycles after the effective date of this AD, whichever occurs later.

(iii) For Model BAe 146-200 airplanes on which Modification HCM00021J has not been accomplished: Inspect prior to the accumulation of 12,600 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever occurs later.

(iv) For Model BAe 146-200 airplanes on which Modification HCM00021J has been accomplished: Inspect prior to the accumulation of 11,600 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever occurs later.

(v) For Model BAe 146-300 airplanes on which Modification HCM01000B has not been accomplished: Inspect prior to the accumulation of 17,200 total flight cycles, or within 1,400 flight cycles after the effective date of this AD, whichever occurs later.

(b) Repeat the inspections required by paragraph (a) of this AD at the intervals defined in Significant Structural Item (SSI) Task No. 53-20-160 as detailed in Section 6 of the BAe 146 Maintenance Review Board Report, Revision 5, dated November 1998.

Corrective Action

(c) If any cracking is detected during any inspection required by paragraph (a) or (b) of this AD, prior to further flight, repair in accordance with a method approved by either the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Civil Aviation Authority (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the manager's approval letter must specifically reference this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The inspections shall be done in accordance with British Aerospace Service Bulletin SB.53-144, dated April 27, 1998, or British Aerospace Service Bulletin SB.53-144, Revision 1, May 21, 1999. Revision 1 of British Aerospace Service Bulletin 53-144 contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1-3, 7	1	May 21, 1999
4-6, 8-10	Original	April 27, 1998

(1) The incorporation by reference of British Aerospace Service Bulletin SB.53-144, Revision 1, dated May 21, 1999, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of British Aerospace Service Bulletin SB.53-144, dated April 27, 1998, was approved previously by the Director of the Federal Register as of November 10, 1998 (63 FR 53550, October 6, 1998).

(3) Copies may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in British airworthiness directive 005-04-98.

(g) This amendment becomes effective on April 24, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 9, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**BRITISH AEROSPACE REGIONAL AIRCRAFT
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-28 BRITISH AEROSPACE REGIONAL AIRCRAFT (Formerly British Aerospace Regional Aircraft Limited, Avro International Aerospace Division; British Aerospace, PLC; British Aerospace Commercial Aircraft Limited): Amendment 39-11638. Docket 99-NM-347-AD.

Applicability: All Model BAe 146 and Avro 146-RJ series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking or corrosion of the forward attachment bolts of the engine pylon to wing interface, which could result in reduced structural integrity of the engine pylon attachment, accomplish the following:

Inspection and Corrective Action

(a) Within 4 years since date of manufacture, or within 2,000 flight cycles after the effective date of this AD, whichever occurs later: Except as provided by paragraph (b) of this AD, perform applicable inspections (dye penetrant, magnetic particle, and detailed visual) to detect discrepancies (including damage, cracking, and corrosion) of the forward attachment bolts of the engine pylon to wing interface on each engine, in accordance with British Aerospace Service Bulletin SB.54-10, dated September 16, 1999. If any discrepancy is detected, prior to further flight, perform applicable corrective actions in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(b) Replacement of all bolts with new bolts in accordance with British Aerospace Service Bulletin SB.54-10, dated September 16, 1999, within the compliance time specified in paragraph (a) of this AD, is an acceptable alternative for compliance with the requirements of paragraph (a), provided all installation methods (including retorquing the bolts at a lower level, and applying sealant to the bolts) specified in the service bulletin are followed.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with British Aerospace Service Bulletin SB.54-10, dated September 16, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in British airworthiness directive 006-09-99.

(f) This amendment becomes effective on April 26, 2000.

FOR FURTHER INFORMATION CONTACT:

Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on March 9, 2000.

Franklin Tiangsing, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-29 BOEING: Amendment 39-11639. Docket 98-NM-58-AD.

Applicability: Model 737-100, -200, -300, -400, and -500 series airplanes; having line numbers 1 through 2737 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect fatigue cracking of the forward pressure bulkhead, which could result in rapid decompression of the airplane fuselage, accomplish the following:

Initial and Repetitive Inspections

(a) Prior to the accumulation of 20,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, perform inspections of the center web, vertical chords, and side chord areas of the forward pressure bulkhead for fatigue cracking, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1173, Revision 2, dated January 15, 1998, or Revision 3, dated May 6, 1999. Thereafter, repeat the inspections at intervals not to exceed 6,000 flight cycles until the preventive modifications specified by paragraph (c) of this AD have been accomplished.

Repairs

(b) If any crack is found during any inspection required by paragraph (a) of this AD, prior to further flight, repair the area in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53A1173, Revision 1, dated April 25, 1996, or Boeing Alert Service Bulletin 737-53A1173, Revision 2, dated January 15, 1998, or Revision 3, dated May 6, 1999; in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings; except, where the alert service bulletin specifies that the manufacturer may be contacted for repair instructions, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Optional Terminating Action

(c) Accomplishment of the preventive modifications of the center web, vertical chords, and side chord areas, including the side chord areas at water line 207, of the forward pressure bulkhead, in accordance with Boeing Alert Service Bulletin 737-53A1173, Revision 3, dated May 6, 1999, constitutes terminating action for the repetitive inspections requirements of paragraph (a) of this AD for that area.

NOTE 2: Accomplishment of the preventive modification of the vertical chords and side chord areas at water line 195 in accordance with Boeing Alert Service Bulletin 737-53A1173, Revision 2, constitutes terminating action for the repetitive inspections requirements of paragraph (a) of this AD for the vertical chords and side chord at WL 195 only.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The inspections shall be done in accordance with of Boeing Alert Service Bulletin 737-53A1173, Revision 2, dated January 15, 1998, or Boeing Alert Service Bulletin 737-53A1173, Revision 3, dated May 6, 1999. Except as provided by paragraph (b) of this AD, repairs shall be accomplished in accordance with Boeing Service Bulletin 737-53A1173, Revision 1, dated April 25, 1996, or Boeing Alert Service Bulletin 737-53A1173, Revision 2, dated January 15, 1998, or Boeing Alert Service Bulletin 737-53A1173, Revision 3, dated May 6, 1999.

2000-05-29

The preventive modifications, if accomplished, shall be done in accordance with Boeing Alert Service Bulletin 737-53A1173, Revision 3, dated May 6, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective on April 24, 2000.

FOR FURTHER INFORMATION CONTACT:

Nenita K. Odesa, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2557; fax(425) 227-1181

Issued in Renton, Washington, on March 10, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

**THE BOEING COMPANY
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-05-30 BOEING: Amendment 39-11640. Docket 99-NM-22-AD.

Applicability: Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, SR, and SP series airplanes; certificated in any category; equipped with Pratt & Whitney Model JT9D-3 or -7 series engines, General Electric Model CF6-45 or -50 series engines, or Rolls-Royce Model RB211-524B, C, or D series engines.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent engine thrust control cable failures, which could result in a severe asymmetric thrust condition during landing, and consequent reduced controllability of the airplane, accomplish the following:

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Repetitive Inspections

(a) For all airplanes: Within 18 months after the effective date of this AD, accomplish the "Thrust Control Cable Inspection Procedure" specified in Appendix 1. (including Figure 1) of this AD to verify the integrity of the engine thrust control cables. Prior to further flight, replace any discrepant component found, in accordance with the procedures described in the Boeing 747 Maintenance Manual. Repeat the detailed visual inspection thereafter at intervals not to exceed 18 months.

Modification

(b) For airplanes identified in Boeing Service Bulletin 747-76-2019, dated June 9, 1971: Within 18 months after the effective date of this AD, modify the strut bulkhead assembly to enlarge the holes (2 places in each strut) through which the engine thrust control cables pass, in accordance with the service bulletin.

Inspection/Replacement

(c) For airplanes equipped with General Electric Model CF6 series engines and identified in Boeing Service Bulletin 747-76-2067, Revision 1, dated November 19, 1987: Within 18 months after the effective date of this AD, perform a one-time inspection of each nacelle strut idler pulley to determine the type of pulley installed, in accordance with the service bulletin.

NOTE 3: This paragraph does not apply to airplanes equipped with Pratt & Whitney Model JT9D-70 engines.

(1) If no aluminum-type pulley is installed, no further action is required by this paragraph.

(2) If any aluminum-type pulley is installed, prior to further flight, accomplish paragraphs (c)(2)(i) and (c)(2)(ii) of this AD in accordance with the service bulletin.

(i) Replace any aluminum-type pulley with a phenolic-type pulley having Boeing part number BACP30F4.

(ii) Except as provided by paragraph (d) of this AD: Perform a detailed visual inspection of the engine thrust control cables in any area where an aluminum-type pulley was installed, to detect wear. If any wear outside the criteria contained in Chapter 20-21-03 of the Boeing 747 Maintenance Manual is found, prior to further flight, replace the cable with a new cable, in accordance with the service bulletin. If any wear within the criteria contained in the maintenance manual is found, no further action is required by this paragraph.

NOTE 4: Accomplishment of the actions specified in Boeing Service Bulletin 747-76-2067, dated September 26, 1986, is acceptable for compliance with the actions required by paragraph (c) of this AD.

(d) Where Boeing Service Bulletin 747-76-2067, Revision 1, dated November 19, 1987, specifies that the actions required by paragraph (c)(2)(ii) of this AD may be accomplished in accordance with an "operator's comparable procedure," the actions must be accomplished in accordance with the applicable chapters of the Boeing 747 Maintenance Manual, as specified in the service bulletin.

Replacement

(e) For airplanes identified in Boeing Service Bulletin 747-76A2068, Revision 3, dated August 22, 1991; including Notice of Status Change 747-76A2068 NSC 2, dated December 12, 1991: Within 18 months after the effective date of this AD, replace aluminum idler pulley brackets with steel brackets, in accordance with paragraphs E., F., G., and H. of the Accomplishment Instructions of the service bulletin.

Inspection/Modification

(f) For airplanes identified in Boeing Alert Service Bulletin 747-76A2073, Revision 1, dated July 28, 1988: Within 18 months after the effective date of this AD, accomplish paragraphs (f)(1) and (f)(2) of this AD, in accordance with the alert service bulletin.

(1) Perform a detailed visual inspection of the engine thrust control cables and pulley mounting bracket screws in the area aft and above main entry door number 2 on the left and right sides of the airplane to detect damage. If any damage is found, prior to further flight, replace the cable with a new cable.

(2) Modify the pulley mounting bracket.

NOTE 5: Accomplishment of the actions specified in Boeing Alert Service Bulletin 747-76A2073, dated February 4, 1988, is acceptable for compliance with the actions required by paragraph (f) of this AD.

Inspection/Modification/Replacement

(g) For Model 747-100B SUD series airplanes identified in Boeing Service Bulletin 747-53-2327, Revision 2, dated September 24, 1998, with angle assemblies having Boeing part numbers 015U0454-63 and 015U0454-64 installed at body station 970: Within 18 months after the effective date of this AD, perform a detailed visual inspection to measure the clearance between the engine thrust control cables and the cable penetration holes, in accordance with the Cable Chafing Inspection of the Accomplishment Instructions of the service bulletin. If insufficient clearance exists, as specified in the service bulletin, prior to further flight, accomplish paragraphs (g)(1) and (g)(2) of this AD.

(1) Modify the cable penetration holes or replace the plate, as applicable, in accordance with Figure 7 of the service bulletin.

(2) Perform a detailed visual inspection of the engine thrust control cables in any area of the plate to detect wear, in accordance with Chapter 20-21-03 of the Boeing 747 Maintenance Manual. If any wear outside the criteria contained in the maintenance manual is found, prior to further flight, replace the cable with a new cable, in accordance with the procedures described in the Boeing 747 Maintenance Manual. If any wear within the criteria contained in the maintenance manual is found, no further action is required by this paragraph.

Alternative Methods of Compliance

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 6: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as provided by paragraphs (a), (d), and (g)(2) of this AD, the actions shall be done in accordance with the following Boeing Service Bulletins, which contain the specified list of effective pages, as applicable:

Service Bulletin Referenced & Date	Page Number Shown on Page	Revision Level Shown on Page	Date Shown on Page
76-2019, June 9, 1971	1-6	Original	June 9, 1971
747-76-2067, Revision 1, November 19, 1987	1-4 5-12	1 Original	November 19, 1987 September 26, 1986
747-76A2068, Revision 3 August 22, 1991	1, 3-30 2	3 2	August 22, 1991 July 20, 1989
Notice of Status Change 747-76A2068, NSC 2 December 12, 1991	1	Original	December 12, 1991
747-76A2073, Revision 1 July 28, 1988	1-4, 12 5-11, 13	1 Original	July 28, 1988 February 4, 1988
747-53-2327, Revision 2 September 24, 1998	1-80	2	September 24, 1998

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(k) This amendment becomes effective on April 24, 2000.

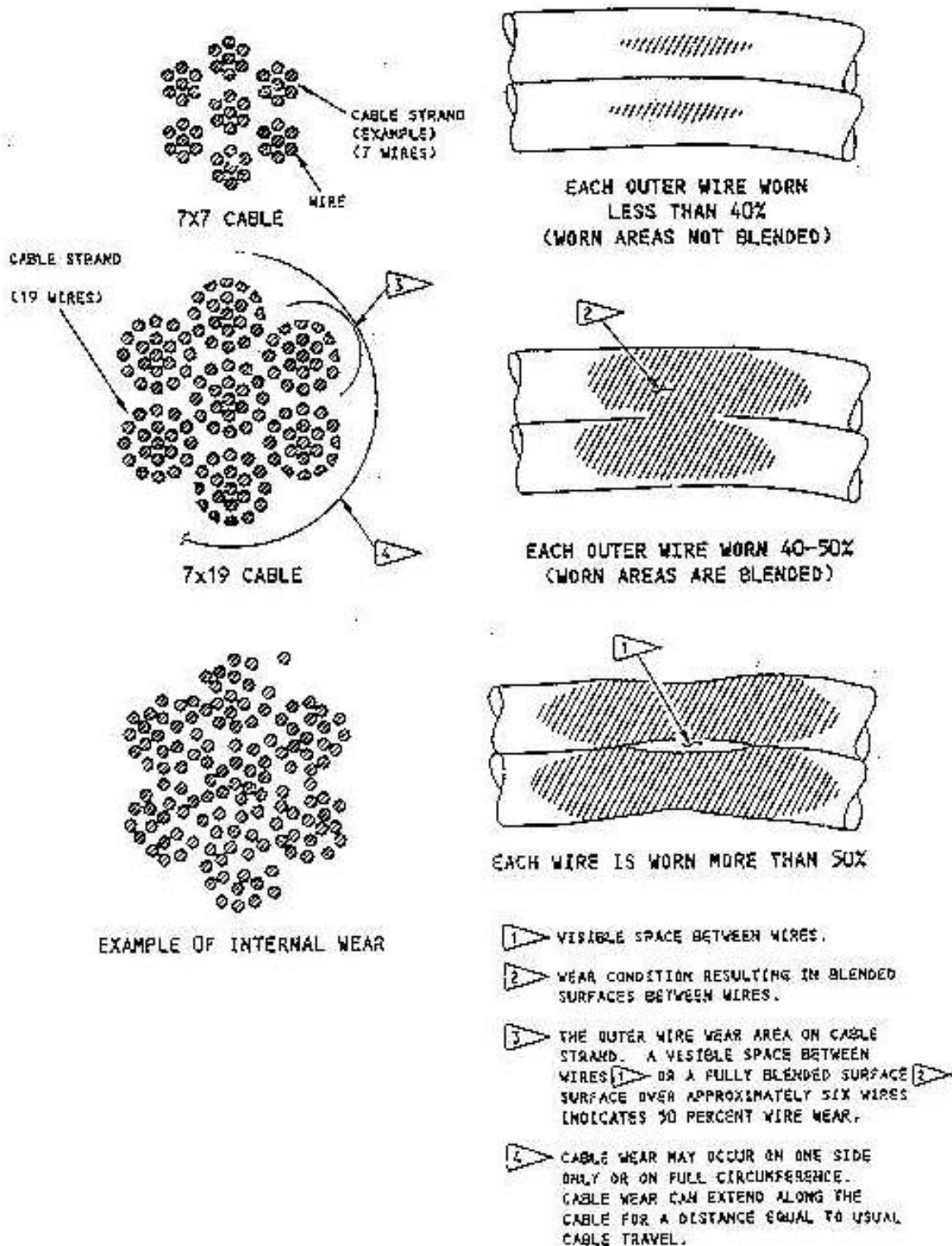
FOR FURTHER INFORMATION CONTACT:

Dionne M. Krebs, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2250; fax(425) 227-1181.

Issued in Renton, Washington, on March 10, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

FIGURE 1



APPENDIX 1

THRUST CONTROL CABLE INSPECTION PROCEDURE

1. General

A. Clean the cables, if necessary, for the inspection, in accordance with Boeing 747 Maintenance Manual 12-21-05.

B. Use these procedures to verify the integrity of the thrust control cable system. The procedures must be performed along the entire cable run for each engine. To ensure verification of the portions of the cables which are in contact with pulleys and quadrants, the thrust control must be moved by operation of the thrust and/or the reverse thrust levers to expose those portions of the cables.

C. The first task is an inspection of the control cable wire rope. The second task is an inspection of the control cable fittings. The third task is an inspection of the pulleys.

NOTE: These three tasks may be performed concurrently at one location of the cable system on the airplane, if desired, for convenience.

2. Inspection of the Control Cable Wire Rope

A. Perform a detailed visual inspection to ensure that the cable does not contact parts other than pulleys, quadrants, cable seals, or grommets installed to control the cable routing. Look for evidence of contact with other parts. Correct the condition if evidence of contact is found.

B. Perform a detailed visual inspection of the cable runs to detect incorrect routing, kinks in the wire rope, or other damage. Replace the cable assembly if:

(1) One cable strand had worn wires where one wire cross section is decreased by more than 40 percent (see Figure 1),

(2) A kink is found, or

(3) Corrosion is found.

C. Perform a detailed visual inspection of the cable: To check for broken wires, rub a cloth along the length of the cable. The cloth catches on broken wires.

(1) Replace the 7x7 cable assembly if there are two or more broken wires in 12 continuous inches of cable or there are three or more broken wires anywhere in the total cable assembly.

(2) Replace the 7x19 cable assembly if there are four or more broken wires in 12 continuous inches of cable or there are six or more broken wires anywhere in the total cable assembly.

3. Inspection of the Control Cable Fittings

A. Perform a detailed visual inspection to ensure that the means of locking the joints are intact (wire locking, cotter pins, turnbuckle clips, etc.). Install any missing parts.

B. Perform a detailed visual inspection of the swaged portions of swaged end fitting to detect surface cracks or corrosion. Replace the cable assembly if cracks or corrosion are found.

C. Perform a detailed visual inspection of the unswaged portion of the end fitting. Replace the cable assembly if a crack is visible, if corrosion is present, or if the end fitting is bent more than 2 degrees.

D. Perform a detailed visual inspection of the turnbuckle. Replace the turnbuckle if a crack is visible or if corrosion is present.

4. Inspection of Pulleys

A. Perform a detailed visual inspection to ensure that pulleys are free to rotate. Replace pulleys which are not free to rotate.

**DORNIER LUFTFAHRT GMBH
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-06-02 DORNIER LUFTFAHRT GMBH: Amendment 39-11642; Docket No. 99-CE-43-AD.

(a) What airplanes are affected by this AD?: Models Dornier 228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, Dornier 228-202, and Dornier 228-212 airplanes, all serial numbers, that are:

- (1) equipped with pneumatic deicing boots; and
- (2) certificated in any category.

(b) Who must comply with this AD?: Anyone who wishes to operate any of the above airplanes on the U.S. Register. The AD does not apply to your airplane if it is not equipped with pneumatic de-icing boots.

(c) What problem does this AD address?: The information necessary to activate the pneumatic wing and tail deicing boots at the first signs of ice accumulation is critical for flight in icing conditions. If we did not take action to include this information, flight crews could experience reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the airplane prior to the first deicing cycle.

(d) What must I do to address this problem?: To address this problem, you must revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following requirements for activation of the ice protection systems. You must accomplish this action within the next 10 calendar days after the effective date of this AD, unless already accomplished. You may insert a copy of this AD in the AFM to accomplish this action:

“• Except for certain phases of flight where the AFM specifies that deicing boots should not be used (e.g., take-off, final approach, and landing), compliance with the following is required.

- Wing and Tail Leading Edge Pneumatic Deicing Boot System, if installed, must be activated:
 - At the first sign of ice formation anywhere on the aircraft, or upon annunciation from an ice detector system, whichever occurs first; and
 - The system must either be continued to be operated in the automatic cycling mode, if available; or the system must be manually cycled as needed to minimize the ice accretions on the airframe.
- The wing and tail leading edge pneumatic deicing boot system may be deactivated only after:
 - Leaving known or observed/detected icing that the flight crew has visually observed on the aircraft or was identified by the on-board sensors; and
 - After the airplane is determined to be clear of ice.”

NOTE: The FAA recommends periodic treatment of deicing boots with approved ice release agents, such as ICEX™, in accordance with the manufacturer's application instructions.

(e) Can the pilot accomplish the action?: Yes. Anyone who holds at least a private pilot certificate, as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), may incorporate the AFM revisions required by this AD. You must make an entry into the aircraft records that shows compliance with this AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(f) Can I comply with this AD in any other way?: Yes.

(1) You may use an alternative method of compliance or adjust the compliance time if:

- (i) Your alternative method of compliance provides an equivalent level of safety; and
- (ii) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager.

(2) This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(g) Where can I get information about any already-approved alternative methods of compliance?: Contact the Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4091.

(h) What if I need to fly the airplane to another location to comply with this AD?: The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(i) When does this amendment become effective?: This amendment becomes effective on May 5, 2000.

FOR FURTHER INFORMATION CONTACT: Mr. John P. Dow, Sr., Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 506, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4090.

Issued in Kansas City, Missouri, on March 10, 2000.

Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.

**FAIRCHILD AIRCRAFT CORPORATION
AIRWORTHINESS DIRECTIVE
LARGE AIRCRAFT**

2000-06-04 FAIRCHILD AIRCRAFT CORPORATION.: Amendment 39-11644; Docket No. 99-CE-52-AD.

(a) What airplanes are affected by this AD?: Models SA226-T, SA226-AT, SA226-T(B), SA227-AT, SA227-TT, SA226-TC, SA227-AC, SA227-PC, SA227-BC, SA227-CC, SA227-DC airplanes, all serial numbers, that are:

- (1) Equipped with pneumatic deicing boots; and
- (2) Certificated in any category.

(b) Who must comply with this AD?: Anyone who wishes to operate any of the above airplanes on the U.S. Register. The AD does not apply to your airplane if it is not equipped with pneumatic de-icing boots.

(c) What problem does this AD address?: The information necessary to activate the pneumatic wing and tail deicing boots at the first signs of ice accumulation is critical for flight in icing conditions. If we did not take action to include this information, flight crews could experience reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the airplane prior to the first deicing cycle.

(d) What must I do to address this problem?: To address this problem, you must revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following requirements for activation of the ice protection systems. You must accomplish this action within the next 10 calendar days after the effective date of this AD, unless already accomplished. You may insert a copy of this AD in the AFM to accomplish this action:

“• Except for certain phases of flight where the AFM specifies that deicing boots should not be used (e.g., take-off, final approach, and landing), compliance with the following is required.

- Wing and Tail Leading Edge Pneumatic Deicing Boot System, if installed, must be activated:
 - At the first sign of ice formation anywhere on the aircraft, or upon annunciation from an ice detector system, whichever occurs first; and
 - The system must either be continued to be operated in the automatic cycling mode, if available; or the system must be manually cycled as needed to minimize the ice accretions on the airframe.
- The wing and tail leading edge pneumatic deicing boot system may be deactivated only after:
 - Leaving known or observed/detected icing that the flight crew has visually observed on the aircraft or was identified by the on-board sensors; and
 - After the airplane is determined to be clear of ice.”

NOTE: The FAA recommends periodic treatment of deicing boots with approved ice release agents, such as ICEX™, in accordance with the manufacturer's application instructions.

(e) Can the pilot accomplish the action?: Yes. Anyone who holds at least a private pilot certificate, as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), may incorporate the AFM revisions required by this AD. You must make an entry into the aircraft records that shows compliance with this AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(f) Can I comply with this AD in any other way?: Yes.

(1) You may use an alternative method of compliance or adjust the compliance time if:

- (i) Your alternative method of compliance provides an equivalent level of safety; and
- (ii) The Manager, Small Airplane Directorate, approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager.

(2) This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(g) Where can I get information about any already-approved alternative methods of compliance?: Contact the Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4121; facsimile: (816) 329-4091.

(h) What if I need to fly the airplane to another location to comply with this AD?: The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(i) When does this amendment become effective?: This amendment becomes effective on May 5, 2000.

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Issued in Kansas City, Missouri, on March 10, 2000.

Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.